Teacher Training in Vocational Education

Orientations
Professional Competencies

A NEW DIRECTION FOR SUCCESS

Québec

Teacher Training in
Vocational Education

Orientations

Professional Competencies

Notice

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DESIGN AND TEXT

This document is an adaptation of a document previously published by the Ministère de l'Éducation, *Teacher Training—Orientations—Professional Competencies* (Martinet, Gauthier and Raymond 2000), which covered the subject of teacher training in the field of general education.

This document was designed by staff at the Direction de la formation et de la titularisation du personnel scolaire at the MEQ, assisted by Jean-Claude Vachon, a professor in the Education and Psychology Department at the Université du Québec à Chicoutimi. Richard Gagnon, a professor in the Faculty of Education at Université Laval, also helped finalize the document.

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The vocational education sector has changed considerably over the last fifteen years. The increased involvement of employers in designing competency-based programs, the reconfiguration of the list of available programs, and the major investments made in buildings and material resources at vocational education centres are some examples of the changes made. They were implemented to offer a better response to the needs of the labour market and to prepare a qualified work force able to find and keep employment in a constantly-evolving working environment. Given this context, it is important to ensure that vocational education teachers have an expert understanding of the trade they teach, and continue to update their knowledge. Their expertise must be supported by training in teaching methods that takes into account the special features of the vocational education sector.

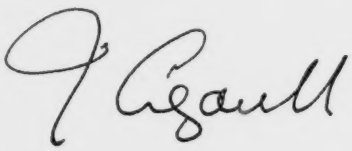
This orientation document for teacher training in vocational education is part of an ongoing process of professionalization, which is based on the professional competencies of the teaching profession and the proposed training plan.

The document reflects the results of a far-ranging operation to consult the various partners of the education community, and constitutes the MEQ's official reference document for teacher training in the field of vocational education.

I have asked the Comité d'agrément des programmes de formation à l'enseignement (CAPFE) to withdraw the existing teacher training programs for vocational education and to examine the new programs submitted in compliance with *Teacher Training in Vocational Education—Orientations—Professional Competencies.* I have also asked the Committee to ensure that the programs it recommends as programs leading to the issue of a teaching licence comply with MEQ orientations and allow students to attain the professional competencies described in that document.

More specifically, I have asked the CAPFE to pay particular attention to the methods implemented by the universities to ensure, first, that the teacher training they provide matches the features of the vocational education sector and, second, that the training is made available throughout Québec. The Committee will also be responsible for ensuring that vocational education teachers master the language of instruction, since the standards in this area will necessarily be set at a high level.

I have no doubt that the universities will design innovative programs that take into consideration the concerns of the education and business communities. I have every confidence that the various partners in the education community, and Québec's universities in particular, will unite their efforts to train a new generation of vocational education teachers. I would also like to take this opportunity to thank them for their support and for the input they have provided during the preparation of these orientations.



FRANÇOIS LEGAULT
Minister of State for Education and Youth

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INTRODUCTION

Today's political, social, demographic, economic and cultural realities have forced Québec to reflect on the mission and organization of education. The Estates General on Education, a large-scale public consultation process launched in the spring of 1995, provided a diagnostic assessment of the state of education in Québec.

At the end of its proceedings, the Commission for the Estates General on Education attempted to clarify the aims of the education system and recommended that the mission of the education system be redefined in terms of three main goals: to instruct, to socialize and to provide qualifications. The Commission also identified a number of priority areas for the future of education in Québec.

Following the publication of the Commission's final report, *Renewing Our Education System: Ten Priority Actions* (Commission for the Estates General on Education, 1996), the Ministère de l'Éducation (referred to in this document as the MEQ) announced the broad lines of the reform it was about to launch. All of Québec society, not just the education community, was urged to join in efforts to raise graduation rates at all levels of education. Published in 1997, the plan of action for the reform of the education system, *A New Direction for Success*, charted seven major lines of action: providing services for young children; teaching the essential subjects; giving more autonomy to schools; supporting Montréal schools; intensifying the reform of vocational and technical education; consolidating and rationalizing postsecondary education; and providing better access to continuing education (Ministère de l'Éducation 1997: 1). In 1995, a task force had also made a certain number of recommendations concerning vocational education, most of which were reiterated in the Estates General report.

Several of these recommendations will clearly have an impact on the training of vocational education teachers. The training provided must be harmonized with the changes that have occurred in the field of vocational education, to ensure that it takes into account the new realities of this sector of education.

In this document, the MEQ defines the orientations for vocational education, the core competencies student teachers are expected to have acquired by the end of their training, and a training plan specially designed for the vocational education sector. The setting of these guidelines is only a first step to be followed by the development of programs by the universities, the accreditation of the programs by the Comité d'agréement des programmes de formation à l'enseignement (CAPFE), and adjustments to teacher certification.

The orientations and reference framework presented here are based, first, on the guiding principles of the reform and, second, on recent studies, research and pilot projects in the field of teacher training. The analyses and recommendations contained in the many briefs and opinions submitted by Québec associations,

institutions and organi tions, together with the comments made by individuals in both the university community and the school system, proved to be a major source of inspiration and reflection. The MEQ's only goal in submitting this document is to ensure that prospective teachers acquire the training they will need to practise their profession, while respecting the prerogative of the universities to design their own programs and training structures. In this way the MEQ remains faithful to its primary mission, which is to ensure, together with all partners concerned, high-quality education for all students in Québec.

This document is an adaptation of *Teacher Training—Orientations—Professional Competencies*. Some chapters have been completely rewritten, others have been modified, and some have remained almost identical to those found in the original document, which defined the orientations and professional competencies applicable in the general education sector. Although the professional competencies student teachers are expected to acquire are the same for all sectors, this document defines the meaning, scope and degree of mastery of each competency on the basis of the specific features of the vocational education sector. In addition, the proposed training plan reflects both the way in which vocational education teachers generally join the profession, and the way in which they usually receive their training.

Chapter 1

The Place of Vocational Education

1 THE PLACE OF VOCATIONAL EDUCATION

Vocational education is part of a social and economic context that evolves constantly in response to the major changes that have affected Québec society in recent decades. The school system, in general, and the vocational education sector in particular have had to adapt to these changes, and teaching approaches have also been transformed. As a result, the content and process of vocational education teacher training programs must be modified to adapt to the changes that have occurred in society as a whole.

Without giving an exhaustive account of all the changes that have affected society in recent years, it is important to outline those that have left their mark on the school system and, in particular, on the teaching profession, and their effect on vocational education.

1.1 Changes in Québec society

One of the main observations that can be made about present-day society concerns the continuous and rapid pace of change at all levels, especially in the political, cultural and social arenas. More than ever before, it is important for individuals and institutions to fully understand this new reality and to meet the challenges it raises, and neither schools, nor the vocational education and teacher training sectors, constitute an exception to this rule.

1.1.1 Political change

A significant feature of contemporary societies is the transformation of the role of the State. Not so long ago, at the time of the Quiet Revolution, the State was central to all spheres of society, whereas in recent years its importance and function have come under increasing scrutiny.

In Québec, the way in which the role of the State has been transformed is reflected in the growing trend towards decentralization, with local authorities gaining new powers and responsibilities. Governing boards, introduced by the 1999 amendments to the *Education Act*, are the most obvious example of this trend in the world of education.

The increased autonomy given to schools is based, in particular, on the professional autonomy of the teaching staff. Teachers are required to collaborate actively with other members of the school team and the education community. In some areas, the legislative framework even assigns teachers exclusive responsibility. Specifically, in each school, teachers help define the educational project, the student supervision policy, the approach used to implement the basic school regulation and the guidelines for enriching or adapting programs of study. They are also given a say in decisions about rules of conduct and safety measures, the time allocation for each subject, the program planning of educational activities, and the student services to be offered. Lastly, teachers can make proposals concerning local programs of study, new instructional approaches, the selection of textbooks and instructional materials, and evaluation standards and procedures.

Clearly, the scope of the professional competencies teachers will now be required to hold following the education reform has been extended considerably, and goes well beyond their work in the classroom. With the establishment of school governing boards, teachers are now called upon to take on new roles, prompting them to open up to the community.

1.1.2 Cultural changes

Another feature of contemporary society worth noting is the emergence of plurality at all levels. The cultural makeup of Québec society is being transformed, and its members now represent a range of nationalities and cultures. In addition, an array of new political, religious, spiritual and environmental values have emerged, and there is a focus on greater social equality based on genuine democracy.

Schools, like the society of which they form a part, must now take diversity into account and learn to deal with different nationalities, cultures, points of view, values and behaviour patterns. This presents a direct challenge for schools, whose mission is to form responsible citizens, in addition to providing vocational education in order to train qualified, competent workers and effective entrepreneurs.

This diversity of cultures and values requires teachers to make a greater effort to understand and accept the diversity of individuals and needs and, as a result, to adapt their objectives and teaching practices, which must leave room to recognize various pedagogical approaches and seek a fairer balance between the rights of the individual students who make up each class.

1.1.3 Social changes

Although further progress remains to be made, equality between the sexes has improved considerably in Québec. Schools, and the vocational education sector in particular, have an important role to play in changing mindsets and attitudes. They must promote egalitarian relations between men and women, and an improved set of career choices for women. It must be remembered that women are currently represented in significant numbers in only four of the nineteen sectors of vocational education, in fact the four sectors traditionally occupied by women.

Québec society has also seen major change in terms of values, as reflected in changes to the family unit, violence, consumerism, drugs, the school dropout problem, psychological distress and suicide. These are all elements that have a significant influence on students, their chances of success at school and their attitudes to teachers. Vocational education teachers, like the other members of the school staff, are increasingly expected to offer students guidance, advice and support, in addition to their traditional tasks of transmitting knowledge and developing skills.

The relationship with authority has also undergone considerable change. In schools and vocational education centres, teachers sometimes experience difficult situations with their students, which is why the whole question of class management has taken on primary importance. This is especially true in the vocational education sector, given the wide range of student backgrounds in terms of age (youth or adult), origin, years of schooling and civil status. The gap between permissiveness and authoritarianism needs to be filled with newly developed relationships at school, thereby ensuring that learning and education take place. This new relationship with authority calls in a complex way on the ethical aspects of a teacher's work.

1.2 Economic development in Québec

Québec's economy has undergone significant changes in recent decades. To remain competitive at the international level, Québec has come to rely increasingly on the development of a knowledge-based economy. This requires far-reaching changes in terms of worker qualifications, organizational structures, the use of existing resources, access to information, the use of science and technology, business creation, and so on.

1.2.1 Worker qualification

All current forecasts point to a continuous rise in the level of the qualifications workers will be expected to hold. Industry demands increased knowledge, versatility and autonomy from its personnel. These new expectations are held not only by employers, but also by unions and individuals who want to prepare for the new realities of the workplace, meaning that the vocational education sector must also make the switch to a knowledge-based economy. Vocational

education teachers must be aware of the challenges and adapt their educational and pedagogical strategies accordingly.

1.2.2 Organizational structures

The current pace of change also requires organizations to adapt. The changes affect vocational education centres just as much as businesses. For example, the decentralization of responsibility has a direct impact on how decision-making powers are shared, on how administrative controls are implemented and on funding approaches for vocational education centres.

More specifically, the organizational changes increase the requirements that teachers must meet; they must have historical awareness and an ability to analyze issues, and they must be able to set up a flexible approach in collaboration with other partners. Vocational education teachers can no longer work in isolation behind the doors of their classrooms. Their new responsibilities under the newly amended *Education Act* require them to work in close contact with their colleagues, partners within the education system, the local community and businesses. As public figures, more will be expected of them and they will have to justify their positions.

1.2.3 Use of resources

Today's economy requires the adaptation and optimization of all available resources, and vocational education is also affected by this requirement. Closer relationships are being developed with the business sector, in particular for the design of new programs, the list of options, the sharing of equipment, and the establishment of on-the-job training and alternating work-study programs. Following the Québec Youth Summit, the government made a commitment to substantially increase the number of on-the-job training places open to young people. The new range of training venues and educational partners has clearly influenced approaches to vocational education.

1.2.4 Trends in science and technology

Schools and vocational education centres are no longer the only places where knowledge is available and transmitted. The rapid development of various means of communication has made information more widely available and affected the traditional role of schools as the preferred location for the transmission of knowledge. It is important to recognize that other sources and modes of access will compete with teachers and may even lead to a re-evaluation of the relevance and specific nature of some of their actions.

The pace of scientific and technological change has strong repercussions on business production modes and the way in which most trades and professions are exercised. While recognizing the need for vocational education students, and their teachers, to use new technologies, remain abreast of new developments and use leading-edge instruments, we believe that it is also important for them

to have a sense of organization and strong general culture and to retain a critical distance with regard to technological changes, especially in the case of vocational education teachers, who are responsible for explaining the changes to their students.

1.2.5 Business creation

Although many large companies have been established in Québec and continue to flourish, the province's economy is largely based on small businesses, which create most new jobs.

According to statistical data, 10% of the population has entrepreneurial potential, but these people must be taught to consider the creation of an independent business as a career possibility. They must also receive proper support in the form of initial training, ongoing professional development and financing, once they have opted to start a business.

Several vocational education sectors offer strong potential for business creation. According to the data published in *The Relance Survey at the Secondary Level—Vocational Education* concerning the situation reported in 1999 by graduates of the 1997-1998 school year, 4.3% of students who graduated with a Diploma of Vocational Studies were self-employed, meaning that 720 new businesses had been set up and were employing 425 people. In addition, given the fact that many people decide to start a business after working in a trade for a number of years, the real statistics are probably even more encouraging. This is why most vocational education programs have a competency relating to small business management as one of their objectives. The inclusion of this competency in a program clearly influences the strategies and educational activities selected by the vocational education teachers concerned.

1.3 The school system

Over the last fifteen years, the school system has undergone a series of transformations, mainly as a result of the new legal and regulatory framework defined in two government documents, *La formation professionnelle à l'école secondaire, énoncé de politique et plan d'action relatif à l'enseignement professionnel au secondaire* (Ministère de l'Éducation 1986) and *A New Direction for Success: Ministerial Plan of Action for the Reform of the Education System* (1997), which set out the nature and objectives of the educational services provided, the responsibilities of the various partners in the education system, and the rights and obligations of teaching staff.

1.3.1 Some key points in the development of vocational education

In the early 1980s, there was a steep decline in student enrollment in vocational education. Outmoded programs, outdated equipment and workshops and business dissatisfaction were the main reasons that led to the major overhaul of the vocational education sector.

In 1986, in a white paper entitled *La formation professionnelle à l'école secondaire, énoncé de politique et plan d'uction relatif à l'enseignement professionnel au secondaire*, the government stated its intention of giving schools the tools they needed to train a high-quality work force able to respond to the needs of businesses, not only with regard to technical competency but also with regard to the ability to adapt to a changing workplace. The actions taken in the wake of the plan were designed, first, to better match course offerings to business needs and, second, to raise the profile of vocational education.

The actions taken included raising the requirements for admission to vocational education programs, revising existing programs to bring them into line with the competency-based approach, rationalizing the list of options, creating new vocational education centres, and establishing a new working partnership between the centres and local businesses via joint computer equipment financing committees.

In January 1995, the MEQ set up a task force, the Groupe de travail sur la relance de la formation professionnelle des jeunes au secondaire et de la formation technique, to analyze the organizational framework for vocational education at the secondary level, evaluate and propose ways to stimulate more business involvement, and draft a plan to raise the profile of vocational and technical education.

The task force defined several possible paths for action, chiefly to increase the number of young students enrolling in vocational education, to reinforce the partnership between the worlds of education and business, to intensify joint work with various partners, to diversify training paths, and to organize on-the-job training and work-study programs. In the view of the task force, raising the profile of vocational educational necessarily involved raising the profile of teaching in the sector, by ensuring that teachers were qualified and able to update their skills. In short, the measures proposed were intended to allow vocational education centres to become key players in the community and make a contribution to the development of their respective regions.

In the spring of 1995, the Estates General on Education were convened to examine the current state of education in Québec and to define the orientation and needs of the education system for the future. Most of the recommendations made by the task force were taken into consideration by the Commission for the Estates General on Education, and one of the priority actions specified in the ministerial plan of action for the reform of the education system, *A New Direction for Success: Ministerial Plan of Action for the Reform of the Education System*, published in October 1996, was to intensify the reform in the vocational and technical education sector; most of the proposed measures were those initially put forward by the task force.

1.3.2 Main framework documents

☛ *Education Act*

In December 1988, the Québec government introduced changes to the *Education Act*. We will look here at the elements that have a direct repercussion on the responsibilities of teaching staff.

First, the amended Act defined a number of professional rights and obligations for teachers. All teachers have the right to direct the conduct of each individual group of students, to use the pedagogical methods that best correspond to the needs and objectives set for the class, and to select appropriate evaluation tools to measure and evaluate students on an ongoing basis, based on the progress they make.

All teachers also have an obligation to contribute to the intellectual and personal development of each student, to instill a desire to learn, to take appropriate steps to encourage students to respect individual rights, to deal with students in a fair and impartial manner, and to take appropriate action to reach and maintain a high degree of professional competency.

In December 1997, the National Assembly adopted amendments to the *Education Act* and other legislative provisions. The amended *Education Act* implemented the objectives set as part of the reform, and made provision for the establishment of new vocational education centres.

The Act also defined a new sharing of responsibility between vocational education centres, school boards and the MEQ. The vocational education centres are now responsible for making pedagogical, administrative and budgetary decisions. This means that at the local level, decision-making has become a process shared between the governing board, the school administration and the school staff.

The Act also confirms the role played by the Comité d'orientation de la formation du personnel enseignant (COFPE) and the Comité d'agrément des programmes de formation à l'enseignement (CAPFE), by providing them with a legal foundation. The COFPE advises the Minister concerning orientations for teacher training at the elementary and secondary levels, while the CAPFE advises the Minister on any matter relating to the accreditation of teacher training programs at the elementary and secondary levels.

☛ *Basic regulation*

The government has introduced a new basic vocational training regulation under section 448 of the new *Education Act*, which came into force on July 1, 2000.

The new basic regulation makes two major changes. First, in addition to the Diploma of Vocational Studies (DVS) and the Attestation of Vocational Specialization (AVS), the list of vocational education programs leading to a

diploma includes the new Attestation of Vocational Education (AVE) program, which leads to the exercise of semi-skilled trades. Second, besides stating that the purpose of instructional services is to help persons acquire the occupational competencies leading to one of the three diplomas and practise a trade, as was the case previously, the Regulation now specifies that the services must also allow students to pursue further studies.

☛ *The education reform in the field of vocational education*

One of the objectives of the ministerial plan of action for the reform of the education system (*A New Direction for Success*) in the area of vocational education was to offer students a choice between several training paths. This was achieved by taking action to increase the number of young people enrolled in vocational education and provide earlier access to vocational education programs. For example, the implementation of the Program for the Diversification of Career Options in Vocational Education (Youth Sector) led to the introduction of three new training possibilities: a pathway leading to the exercise of semi-skilled occupations, admission to programs leading to the Diploma of Vocational Studies (DVS) at the end of the Secondary III year, and integrated secondary-college level programs. Most of the measures introduced as part of the experimental program were retained in the basic vocational training regulation that has been in force since July 1, 2000.

Needless to say, the reform of the vocational education sector undertaken in the late 1980s and the more recent ministerial action plan *A New Direction for Success* have consolidated development in the sector and created a new, more dynamic approach. However, the objective of raising the profile of vocational education remains of primary importance. This will allow young people to choose vocational education as their first option rather than as a stopgap solution after failing to achieve academic goals or changing direction after enrolling in a college program, as is currently the case.

☛ *Educational organization*

In order to properly understand the educational mission of vocational education teachers, it is appropriate here to give a brief overview of the context in which they work. At the secondary level, vocational education is under the responsibility of the school boards and a small number of private institutions. It is designed to help youth-sector and adult-sector students acquire qualifications; it focuses on integration into the labour force, mobility and adaptation to the job market. In addition, since the implementation of the new basic regulation, vocational education must allow students who wish to do so to continue their studies.

☛ *Programs of study*

The programs of study are designed to develop the functional, versatile nature of the training provided, which allows students to experience the tasks and responsibilities connected with the practice of a trade. In this sense, "versatile"

training is training that provides students with fundamental, transferable knowledge, such as technical and scientific concepts and principles that go beyond those required simply to perform certain job tasks. Training is considered versatile when it promotes professional mobility, an ability to adapt to new work situations, and changes of career.

The programs are competency-based. The teachers must train their students to satisfactorily perform a task or activity connected with a trade or profession using the required knowledge, attitudes and motor, cognitive and sensory skills.

☛ ***Collaboration between vocational education centres and businesses***

The MEQ wants businesses to become increasingly involved in the training process, and this is reflected in the ministerial publication *Work-Study in Vocational and Technical Education—General Framework* (Ministère de l'Éducation 1995c). In addition, the government made a commitment at the Québec Youth Summit to work to ensure that 100% of young people acquire qualifications, and to increase the number of on-the-job positions dramatically.

However, alternating work-study programs involve several challenges and can be difficult to implement. They must amount to more than the use of specific training facilities. First, the vocational education centre and business involved must make a commitment to attain a shared objective, that of preparing a work force with the best possible qualifications. To achieve this, an adapted training process must be set up, and a genuine partnership between the centre and the business concerned must be structured. The partnership must develop in a way that reflects the complementary nature of the worlds of education and work, and respects their separate roles. The teacher training programs must take into account the fact that, in order to achieve the vocational education objectives set, the instruction provided must be organized in a way that provides specifically for collaboration between vocational education centres and businesses. As a result, the programs must allow prospective teachers to acquire specially adapted pedagogical approaches.

1.4 Hiring and training vocational education teachers

1.4.1 Specific features of the teacher recruitment process

To be hired in the field of vocational education, teachers must have mastered the trade to be taught. They are often recruited from the world of industry and business.

People who choose to become vocational education teachers have generally completed some kind of vocational or technical training, and have mastered their trade or specialty on the job. When they move to teaching, they do not always have access to pedagogical support or skills upgrading, whether in a vocational education centre or an industrial setting. This situation must change. The individuals who choose to become vocational education teachers must receive better preparation and support.

The recruitment of qualified staff to teach in the vocational education sector involves several difficulties, mainly connected with the lack of qualified teachers in several training areas, the precarious nature of the positions available in vocational education, and the gap, often large, between the wages paid in the business sector and those paid in the field of education.

1.4.2 Current teacher training requirements

Currently, over 30% of vocational education teachers are paid by the hour and are not required to take a university teacher training course to prepare them for teaching.

Under section 23 of the *Education Act*, a person who wishes to obtain a full-time or part-time contract must have a legal teaching licence, which can be either the "autorisation provisoire d'enseigner," known as a provisional teaching authorization, a teaching permit or a teaching diploma.

A temporary teaching licence is issued, at the request of an educational institution, to a candidate who has completed training leading to a Diploma of Vocational Studies (DVS), a Diploma of College Studies (DCS) or an undergraduate university degree, or the equivalent, in a field relating to the subject to be taught, and who also has at least 4,500 hours of relevant job experience. The temporary teaching licence is issued for a two-year period, and is renewable for a maximum of two years on the condition that the candidate has obtained at least 6 credits per year in a specialized vocational education teacher training program.

A teaching permit is issued to teachers who already hold a temporary teaching licence and who have successfully completed a program leading to a Certificate in Vocational Education. Candidates who do not hold a temporary teaching licence but who meet all the requirements for obtaining such a licence can be granted a teaching permit if they hold a Certificate in Vocational Education and are credited with 800 hours of vocational education instruction in an institution recognized by the MEQ.

A teaching diploma is a permanent teaching licence. It is issued to candidates who hold a certificate or Bachelor's degree in vocational education and have successfully completed a probationary period of a maximum duration of 1,200 hours.

1.4.3 University-level teacher training programs

In 1961, the Université de Sherbrooke admitted its first students to the teacher training program in technical education. A few years later, in 1964, the university established the École normale de l'enseignement technique (ENET), with the mission of training teachers to work in technical institutes. Towards the end of the 1960s, to meet the training needs resulting from the widespread hiring of vocational education teachers in comprehensive secondary schools,

Québec universities began to set up teacher training programs specifically for vocational education teachers.

In 1972, the MEQ encouraged the universities to award vocational education teachers a Certificate in Education instead of the diplomas previously issued. The establishment, in 1974, of a program leading to a Bachelor's degree and, in 1979, of the Programme de perfectionnement des maîtres en enseignement professionnel (PPMEP), helped to professionalize teaching in the vocational education sector.

In the years since, the universities have expanded or revised the programs leading to a Bachelor's degree in vocational education. Despite their efforts, the programs have been criticized by vocational education teachers, who accuse the universities of offering programs that are too theoretical and of being unable to offer courses designed to meet their specific needs. Nevertheless, some interesting experimental models have been tested, and some universities have changed their admission requirements to accept candidates other than current vocational education teachers.

Despite the experimental approaches and research of recent years, not all the problems connected with teacher training for vocational education teachers have been solved. The universities are able to provide students with the technical and scientific knowledge connected with the subjects to be taught, but must also meet their specific needs. Bringing prospective teachers into contact as quickly as possible with students and skills upgrading in the subject taught remain major challenges. In addition, the universities will have to adopt a creative approach in selecting ways to make their programs accessible to the entire population, in all regions of Québec.

Chapter 2

General Orientations

2 GENERAL ORIENTATIONS

This orientation document is designed to bring teacher training for vocational education teachers into line with two key concepts: professionalization and a cultural approach to teaching.

Given the proliferation of writing on the concept of professionalization, it is important to clarify its meaning from the outset. Professionalization has two aspects: professionality and professionalism. Professionality is the process undertaken to develop the competencies that make an occupation a profession, i.e. the organization of professional knowledge, ongoing professional development, individual effectiveness and efficiency, the sharing of expertise between group members and the codification of practical knowledge. Professionalism is the process undertaken to gain social and legal recognition for the status of those who practise a given profession.

After presentation of this concept, former definitions of professionality are discussed. Over time, the face of teaching has changed several times, and thanks to professionalization a new legitimacy is now emerging. The makeshift teachers of the period prior to the 17th century and the tradesmen-teachers of the following three centuries were replaced by the scientific teachers of the 20th century. In parallel, and also over a period of several centuries, carpenters, woodworkers, masons and other craftsmen, organized into corporations or guilds, thus keeping the journeyman tradition alive. As we move into the third millennium, and given the new features of the work they perform, teachers are best described as professionals.

The section on professionalization ends with a discussion of a new model for professionality in teaching, designed to give meaning to the teacher training process by aligning it with six dimensions: the competencies required in the new educational context, the complexity of the teaching task, the integration of training with real-life teaching, polyvalent training, the links between training and research, and partnership and concerted action.

The section on the cultural approach to teaching deals with the concept of culture in two ways: culture as an object, and culture as a relationship. Culture as an object has two dimensions: first, a descriptive dimension covering primary culture, in the anthropological sense, and secondary culture, which refers to human works and achievements; and second, a normative dimension, which covers the social choices made in a given time and place to define the attributes of a cultured individual formed by the schooling process. Culture as a relationship covers the building of a relation with the world, a relation with others and a relation with oneself. The section includes an examination of the role of the teacher as a cultural broker; the teacher becomes the inheritor, critic and interpreter of objects and knowledge or, in other words, a person who builds relations. The section on the cultural approach to teaching ends with a discussion of the meaning that should underlie the training of a cultured teacher.

2.1 Professionalization

2.1 Professionalization

2.1.1 Professionalization as a concept

The concept of professionalization refers to two related processes. The first is internal and refers to what has been called "professionality"; the second is external and refers to what Bourdoncle (1991) calls "professionalism." The processes are at the same time different from and complementary to each other (Lang 1999).

2.1.1.1 Professionality

The first aspect of professionalization concerns the development and consolidation, by a group of individuals, of the competencies required to practise a profession. In long-established professions, the competencies are based on, but not limited to, the knowledge base of the field concerned, which is the resource on which action is founded. The professionalization process breaks away from traditional university training, in the sense that providing training in a given academic subject and providing training in the competencies of a given profession are no longer seen as being the same thing. University training therefore contains an unresolved tension between the scientific logic that underlies its classical mission to further the advancement of knowledge, and the professional logic that underlies the objective of training individuals to practise at a high level in a given sector of activity. The first meaning given to professionalization, as an internal process designed to build professionality, covers several dimensions.

The organization of specific professional knowledge

Professionalization requires the organization of the knowledge, skills and attitudes that are specific to the occupation concerned. The resources used to achieve this in themselves constitute professionality, which is made up of all the characteristics of a profession that are a concentrated and rationalized form, to whatever degree, of the knowledge and skills deployed in professional practice. "Professionalization, insofar as it concerns the construction of a profession, refers to practical mastery and a certain degree of rationalization of the work process" (Lang 1999: 29; our translation). In this sense, it is comparable to what students are expected to develop at vocational education centres, in each separate trade or subject.

Ongoing professional development

Individuals trained to practise a particular profession do not become skilled practitioners the moment they finish their training. Rather, they progressively acquire experience and ongoing professional development over the years and, in certain cases, achieve a level of expertise. Professionalization is a dynamic, continuous learning process; given the complexity of the situations and the continually-changing professional context, it is a process that is never completed.

Individual effectiveness and efficiency

The professionalization of an occupation also involves ensuring that individual practitioners reach a specified level of competence and know-how to act correctly. Professionalization, at the individual level, means being able to assemble and combine knowledge, attitudes, techniques and strategies (tactics) to perform specific tasks. In addition, it requires thrift: professionals do not necessarily have all the time or all the financial and material resources they need. They act within a network of constraints, and must design realistic solutions to deal with the problems they encounter.

The sharing of expertise

Professionalization requires a sharing of professional expertise among the members of the group. Not only knowledge and skills are shared, but also an ethical attitude and a shared way of approaching and dealing with situations. This shared, or common, culture can be seen as a professional code that expresses the values, beliefs, attitudes and work-related representations of the group.

The codification of practical knowledge

Professionalization relies on transmissible knowledge, in other words codified practical knowledge that can be transmitted by training. Professionalization is based on a rationalization of the work process that states explicitly, and therefore makes visible and public, the tacit knowledge and skills shared by practitioners. This codification makes it possible to acquire the same knowledge and skills through a training process.

2.1.1.2 Professionalism

Professionalization also has a second meaning, which is social and external and refers to the claiming of a distinct social status as part of the division of labour in society.

Social and legal recognition

In this sense, professionalization refers to the strategies used by a group of individuals to gain recognition from society for a specific, complex and hard-to-acquire set of qualities that give them a form of monopoly over a particular activity and also a form of prestige. This second process has been called "professionalism" by Bourdoncle (1991); it covers all the strategies used by the group to change the status of their activities, giving them exchange value for use in acquiring material or symbolic privileges.

Formerly, the sociology of professions posited a linear professionalization process based on the standards and models of the established liberal professions. Contemporary sociology has shown that the professionalization process does not actually involve making an occupation comply with fixed ideal standards, since those standards are only valid for the older professions and do not reflect the trajectory of the other occupations that have been professionalized. Rather, professionalization is a dynamic, individual strategy to

socially position a constantly-evolving occupation. This dynamic view of the process does not mean, though, that any group can gain professional status simply by setting up a long training process or by proclaiming itself a profession. As pointed out by Chapoulie (1973), recognition of professional status is linked to the dominant ideology of a society at a given point in time and, currently, given the primary importance of science in human activities, the determination of professional status is based on the so-called scientific standard of knowledge (Lang 1999). This is why the strict codification of the work process has strategic importance and underlies the second meaning of professionalization, referred to as professionalism.

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Professionalization is a process that results in the construction of a social identity. Both sides of the process, internal and external, are irreducible but interrelated. Social recognition cannot exist unless the occupation is codified, and codification must include a strategy to obtain professional status and recognition for the value of the service provided, in order to gain a measure of professional monopoly. The transmission of codified practices during initial training is part of the professionalization of the occupation and contributes towards its social recognition.

2.1.2 Former types of professionality

Teaching has been subjected to constant, varied pressure, both within the world of education and in the broader context of society, and has undergone progressive changes that define various specific types of teachers.

2.1.2.1 Makeshift teachers

In Europe, before the 17th century, when school education had not yet been formalized and was restricted to a small segment of the population, knowledge of the subject-matter taught was the only requirement for being a teacher. Anyone who could read, for example, could teach reading and set up as a schoolmaster without any other form of preparation. Similarly, anyone who had mastered a technique or trade could take on apprentices and pass on knowledge to them. Clearly, teaching had not yet been organized and was defined by a random series of personal initiatives, and there were no other requirements apart from knowledge of the subject or techniques being taught. Student groups were not large and teaching could often be conducted as a form of tutoring. Teacher training did not exist, and indeed was not required. Teachers taught as they themselves had been taught, using the centuries-old tradition of a logical progression from the simple to the complex. Learning was an on-the-job process, with students imitating their teachers. However, for the more structured trades such as masonry or carpentry, organizations known as guilds were set up to retain exclusive control over the trade for guild members. The guilds carefully guarded their knowledge, tricks of the trade and manufacturing processes, which were passed on from master craftsmen only to the individuals selected to

participate in the journeyman process. Teachers were quick to adopt this model to pass on the secrets of the teaching profession.

2.1.2.2 Tradesmen teachers

The first attempts to provide teacher training began to emerge in the 17th century, apparently because the combined effects of the Protestant Reformation, the Catholic Counter-Reformation, and a new focus on children and delinquency in major cities emphasized the need to educate the children of the working class and establish schools (Gauthier and Tardif 1996). However, the increased numbers of children requiring schooling created problems for teachers. The basic method in use, at least in small schools, was "tutoring," where the teacher called each child in turn to the front of the class. This became impossible with an increase in class sizes, and a new method was needed. How could larger groups be taught? The teachers of the time came up with an original solution: teaching must be based on a method, and method is found in Nature. At the time, though, Nature was seen as a supernatural entity, a perfectly ordered Nature established by the Creator. We must follow Nature, said Comenius, but a Nature as perfectly regulated as a clock.

The approach to teaching that began to emerge was founded on an ordered vision of the world, with one important extra ingredient: the tips and tricks of the trade suggested by the best teachers and recorded in the earliest teaching manuals. The tips and tricks were consistent with a vision of the world based on total control of the students, who had to be civilized, educated and Christianized.

The entire school system was based on this methodical ideology in which everything had its place: control of time, space, movement, posture, reward, punishment, presence, and the group (simultaneous instruction). The system was found in both Protestant and Catholic institutions, at the primary and secondary levels as, for example, in the colleges of the Jesuit order.

It is important to mention two important facts. First, there was a growing awareness that knowledge of the subject taught did not necessarily make a good teacher, even if it remained a fundamental requirement, and that other types of knowledge were needed to teach well. Second, it became clear that this knowledge could be taught. At the time, the knowledge was mainly imparted through apprenticeship with an experienced master. This formalization of teaching gave rise to a specific professional model: traditional pedagogy. This workmanlike, uniform way of teaching, which can still be seen today, spread throughout the Western world and even beyond, especially through the influence of various religious communities.

2.1.2.3 Scientific teachers

In the late 19th century and early 20th century, traditional teaching, centred on teachers and total control over students and teaching content, began to be criticized. The new ideal was to establish a new type of professionality, based on

a new pedagogy. Two elements became determining factors: the growing importance of science in discussions about teaching, and the need to promote a child-centred form of pedagogy.

The combined effect of these two factors, a focus on science and on children, allowed one subject to dominate the debate during the entire 20th century: psychology. Psychology was both a science and a way to study children, their needs and their development. The first chairs of pedagogy began to appear in France in the early 20th century, with pedagogy defined as the science of education. The intention at the time was clear: to make pedagogy a science, and to make pedagogues scientists. The arguments put forward in support of this Copernican revolution focused on the fact that the pedagogical tradition had flaws that science could correct. For example, Claparède, the founder of the Jean-Jacques Rousseau Institute in Geneva, stated that classroom applications could be deduced from scientific knowledge about the laws of child development. Just as the reference discipline, psychology, was subdivided into many different schools, a wide range of pedagogical models emerged. They can be roughly grouped into two categories, experimental and experiential, depending on whether the focus is on the scientific dimension or on meeting the needs of the child. The first category includes the positivist model, of which behaviourism is the most prominent example, while the second class can be associated with humanist psychology and its derivatives.

Québec lagged behind developments in Europe and the United States in the early part of the century, undergoing its own revolution in the late 1960s when the faculties of education were established. Although in a slightly modified form, scientific ideology was still the dominant force in at least two areas. First, it was considered important to give future teachers a more university-oriented, scientific training, in other words one that required more advanced work in specific academic subjects. This brought about the demise of Québec's normal schools. Between 1970 and 1990, the universities were left more or less free to design their own programs with the result that teacher training was often swamped by subject-specific concerns, with fragmented courses that had little relation to each other or to the occupation of teaching. In addition, the courses deliberately steered clear from the tips and tricks formerly taught in the normal schools. Training in psychopedagogy was often given by instructors from the field of psychology who were not necessarily aware of teaching concerns, based on the general assumption that knowledge of certain psychological theories would eventually filter down to teaching practices. It was implicitly posited that teachers would automatically transfer their knowledge to classroom situations.

However, during the 1970s and 1980s, it became apparent that the notions taught in pedagogy and didactics courses were not actually being transferred to the classroom. Scientific utopianism had failed, just like the model of professionality put forward to displace traditional pedagogy. This failure affected the way in which many people began to view teacher training. First, it helped reinforce the idea that teaching could only be learned through direct involvement and trial and error, rather than on the basis of university research. Second, it provided support for the contention that the main requirement for teaching was knowledge of the subject taught, and that pedagogical concerns were of minor

interest and could be reduced to experience, a passion for teaching or an individual gift.

In the early 1990s the MEQ launched a major reform of teacher training programs. The urgent need for reform was recognized by all players, and the reform was intended to make the act of teaching a professional act. Teacher training needed to be rethought, and a new approach to training programs and approaches, and also to research objectives and methods, was required. The vocational education sector also realized that the time had come to redefine its teacher training orientations, but for various reasons the changes could not be made immediately.

2.1.3 A new model of professionality: the professional teacher

The teacher training reform that began in 1993 stipulated that autonomy and responsibility, two characteristics of professional teaching, could only be based on initial training that prepared teachers to use their ability for critical thinking and for making an active contribution to the development of knowledge about teaching practices (Ministère de l'Éducation 1993: 13).

The reform of the education system undertaken in the 2000s will place even greater emphasis on the professional autonomy of teachers. As mentioned above, increasing diversity in the student population, growing social problems and the tensions created by technological change and the globalization of the economy place intense pressure on teachers as they teach their students. Their work is made harder by social responsibilities and dilemmas they can no longer resolve within a classroom setting (Messing, Seifert and Escalona 1997). Multilateral collaboration agreements must be implemented. Levels of authority and responsibility must be harmonized to re-centre teaching, teacher training and education research on common goals. Teacher training, in particular, must take the actual conditions in which teaching takes place into account and place more emphasis on classroom action, in particular through reflexive analysis. With regard to research, more studies must, among other things, focus on objectives closely related to professional practice and must produce results that can be integrated into teacher training programs.

It is important to note, however, that professionalization is a working hypothesis that raises a number of issues, whether epistemological, political, institutional, economic or social. It is a new departure in the field of education, as reflected in the relative lack of data on actual experience. As stated by Lang, "there is no finalized model today to describe the deliberate development of professional practice, but rather a series of questions about the knowledge and competencies required that are accessible through training" (Lang 1999: 199; our translation). What is clear, however, is that professionalization is not just a concern in Québec, and has taken on an international dimension (Tardif, Lessard and Gauthier 1998). There is a need in various countries to examine this issue and make changes to training programs. It is therefore appropriate to look at various aspects of the new professionality model in the Québec context, in order to direct training programs intended to forge the new professional culture.

2.1.3.1 Competencies to match the new requirements

The new approach to education increases the need to professionalize the act of teaching. The reform of the education system introduces several elements that will affect the role of teachers and the nature and significance of the competencies required to teach. Briefly, these elements are: increased autonomy for schools, an approach to learning that places the student at the heart of the learning process, a competency-based approach to program design, a range of options of varying duration, and the policy of adapting schools to the needs of all students, whether children or adults.

Today, the increased autonomy of vocational education centres and the active involvement of teaching staff in governing boards mean that their pedagogical action now extends beyond the classroom, and requires teachers to work as part of a team. Their professional expertise is required at several levels in the provision of educational services.

The new conception of learning that gives students primary responsibility in the learning process requires teachers to use new pedagogical approaches and ways of dealing with students. Teachers must adapt their teaching methods to the rate of progress of each student; they must focus on student-learners in order to redefine their relationship to knowledge and facilitate its acquisition.

Competency-based programs of study, and the map of options, require teachers to perform some tasks differently and to develop new competencies. Teamwork with colleagues who come into contact with the students in the program or teach other subjects will become especially important in developing, integrating and evaluating competencies over periods ranging from a few days to the length of an entire program.

The new social and educational context requires recognition for the interactive nature of teaching work (Tardif and Lessard 1999). Teachers do not work with inert materials but with living subjects and social cases. Students today are no longer docile beings subjected to the teacher's authority; they resist the teacher's influence, and always want to do something else, or do it differently or at another time: "The teacher's knowledge no longer, in the eyes of students of whatever age, gives him or her an unconditional right to exercise intellectual authority and obtain their attention, trust and obedience. Dislodged from their pedestal, teachers must, day after day, earn the credit and influence they formerly enjoyed automatically" (Joxe quoted in Lang 1999: 129; our translation).

Since the role of the teacher and the context of teaching have changed, new resources (knowledge, skills, attitudes) are required to practise the profession. Certification in a given trade is no longer the sole qualification needed in order to be considered competent to teach. To qualify, teachers must acquire the more complex competencies that underlie the new professionality of the teaching profession.

2.1.3.2 The complexity of the teaching act

The new professionality differs from the positivist paradigm of professional practice, defined as the application of scientific theories to the solving of technical problems in a controlled environment. It also differs from a reproductive conception of training in which the teacher, often unwittingly, is the model that the student attempts to imitate as a recognized expert practitioner. In fact, teaching is characterized by ambiguity, fuzziness, complexity, uncertainty and indeterminacy. A technicist approach to problem resolution, and reproductive pedagogy, will both fail. Rather, the focus must be on construing the problem in order to deal with it: "There has been an essential shift in the intellectual foundation of teaching: interpretational and procedural methods are tending to replace the prescriptive methods of the former model; psychology has even lost its status as the sole reference point outside actual practice, to multidisciplinary approaches to practice and the development of a 'research language in a classroom setting' " (Lang 1999: 172; our translation). There are necessarily limits to both technicity and the foreseeable aspects of teaching, and professionals cannot avoid using their judgment in a given situation and calling on a range of resources (Gauthier et al 1997).

Given that teaching professionals act to solve problems over which they have a limited degree of control and that offer uncertain solutions, their responsibility cannot be based on the students' learning results, but rather on the criteria of whether or not they have implemented the best possible means, in the context, to encourage students to learn. Teaching professionals cannot be held solely responsible for their students in all situations. Just as a physician is not the only person responsible for the recovery of a patient, a teacher is not the only person responsible for the success of a student. The clear standard of the practical result (or desired response), which defines what is expected of a technician who has full control over all the variables of a process, is replaced, in the case of professional teachers who have only limited control over the constraints affecting the outcome, by the ethic of responsibility (Lang 1999:171). The reform of the education system, by emphasizing the exercise of professional autonomy by teachers within both the classroom and the school, places even greater demands on their responsibility.

2.1.3.3 The integration of training with real-life teaching

The proposed professionalization of teaching is intended to promote integrated training. Training future teachers does not just mean exposing candidates to a set of unrelated courses, with no links to professional practice. Connecting courses together involves more than juxtaposition; ensuring that the various components of a program are studied concurrently in the same year does not guarantee that the related knowledge will be integrated.

This is why greater emphasis must be placed not only on a better integration between theoretical and practical courses, but also between practical courses and the actual conditions in which future teachers will practise their profession. For example, knowledge of the teaching subject must be related to the program

content taught in schools. Educational situations must be set up to allow knowledge to be applied and to allow prospective teachers to develop professional competencies such as, for example, designing learning situations for students. The competency must also be demonstrated and evaluated in a real-life classroom context, during placements. This will require university specialists to carry out more fieldwork to help students develop competencies during their placements since, as pointed out by Lessard (1996:10; our translation):

> The relatively low involvement of university teachers in supervising placements causes problems, and challenges our ability to implement truly integrated professional training. How can work on psycho-pedagogical and didactic skills be effectively carried out in a university setting if no direct links are made with training activities in the school environment? How can truly practical didactic training be designed if the trainer does not go into the field, in other words an actual classroom, with the students at some point during the training process? How can a reflexive approach to teaching be instituted if theoretical training (dispensed in the universities) is dissociated from practical training (dispensed by experienced practitioners)? How can progress in pedagogy be achieved if we remain at a distance from the constraints and context of actual teaching practice?

Professionalizing training is firmly grounded in actual practice. It implies a kind of integrating alternation (Malglaive 1994) that allows a connection to be made, at the same time and not within separate training processes, between knowledge-based training and skills-based training, in a real-life context. It differs from the approach based on juxtaposition that involves dispensing practical training after training in the teaching subject, or the model based on applying the relation between the knowledge dispensed and the teaching placements.

The increased importance assigned to practical training is one of the most positive aspects of the teacher training reform undertaken in the early 1990s. However, the organization of practical training requires a considerable effort on the part of both the universities and the schools involved. Universities and schools have been asked to consolidate their partnerships in order to find a solution that will allow practical training to be developed as an essential component of teacher training. In this connection it is important to examine, among other things, the range of activities, organization and supervision models and placement venues that will help to ensure that all future teachers receive practical training.

2.1.3.4 Polyvalent training

One of the underlying principles of professional training is polyvalence. Professionals are expected to have developed various competencies that allow them to perform a variety of duties and tasks and take charge of complex professional situations.

For teaching professionals, polyvalence reflects the nature and range of the competencies to be developed, the professional environment in which they will be exercised, and the areas of teaching practice that must be mastered.

Reference framework for competencies

In this document, the reference framework for competencies in the teaching profession is based on twelve professional competencies. To practise their profession, teachers must have mastered the set of competencies to varying degrees, depending on whether they are new or more experienced teachers.

Because teacher training involves the development of a range of competencies linked to various professional functions, it can be seen as polyvalent training. For example, designing teaching/learning situations, guiding groups of students through activities, evaluating learning, adapting their teaching methods to specific student needs, managing a class group, working in collaboration with the school team, parents and partners, and making a commitment to their own professional development, are all activities that require teachers to apply a wide range of competencies in various professional situations.

Teaching environments

Furthermore, the competencies required for day-to-day teaching can be exercised in a variety of contexts. While some teachers work with groups of students of the same age, but with a strong male or female bias, others work with mixed groups of teenagers, young adults and adults who have returned to complete their education. Many teachers work with students with learning disabilities, social maladjustments or physical impairments, or teach in underprivileged socioeconomic environments or multiethnic areas. Clearly, the teaching profession requires an ability to adapt teaching methods to match different levels of education and school populations and the needs of various individuals and groups. An ability to teach in a range of contexts is, when properly addressed, one of the characteristic features of polyvalent training programs.

Subject areas

The competencies involved in teaching also relate to the resources (knowledge, skills, attitudes) associated with each subject area. Vocational education teachers are expected to teach correctly all the technical and practical knowledge relating to a particular trade at the vocational education centre, and also to supervise students on work-study programs, in close collaboration with the specialists assigned by the business partner and, in some cases, using tools and equipment that are not those found in the vocational education centre. In addition, the need to harmonize programs at different levels and integrate competencies from programs leading to both the Diploma of Vocational Studies (DVS) and Diploma of College Studies (DCS) requires them to demonstrate a high degree of versatility.

2.1.3.5 Links between research and teacher training

Professionalization helps create links between research and training. When responsibility for teacher training was transferred from the normal schools to the universities, research in the field of education was practically nonexistent (Gauthier et al 1997). Although some psychology-based research was carried out, often in a decontextualized, laboratory setting, very little research took into account the complexity of the classroom reality. The same is true of research into teacher training, which only began to develop when responsibility for teacher training was transferred to the universities.

However, the situation has changed enormously over the last 30 years, and research approaches have matured in university faculties of education. More research, carried out in a more rigorous way and with greater emphasis on real-life teaching situations, is being conducted with the result that professional teaching knowledge is becoming increasingly codified. The work of teachers can be described, analyzed and compared, and related to student learning. We can now better understand the nature and relevance of certain teaching practices that promote student learning. We know, for example, that classroom management is a variable that has a particular influence on learning, and that experience-based knowledge has its limits. To assist professionalization, research into teaching practices and also into training approaches must be a priority, and the results must be reinvested in the training of new teachers.

2.1.3.6 Partnership and concerted action by authorities and individuals

The professionalization of the teaching profession requires the establishment of partnerships between various groups, often with their own objectives and their own problems. The major changes that occurred during the reform of the vocational education sector, and the need to improve collaboration between schools, universities and businesses to allow the successful implementation of placement schemes have, in some cases, resulted in the development of continuing partnerships and the establishment of collaborative structures between certain vocational education centres and the authorities responsible for placements in university faculties of education. However, a genuine partnership must go beyond this level, and must be based on a shared vision of professional teacher training, and on the definition and sharing of the roles in the process to the benefit of all concerned. The partnership cannot be developed without the involvement of the various authorities and networks, university teaching staff (including teaching staff in various subjects who help train future school teachers), and experienced practitioners. In order to train teaching professionals, the university community must have more opportunities to experience real-life teaching, and the real-life workplace at first hand, just as the school community must go beyond the isolated implementation of new teaching practices and conduct more systematic research and reviews of new practices.

Professionalization requires concerted action within the universities. It affects the teaching staff involved in a variety of training programs in faculties of education and other faculties. For example, an engineering, computer studies or humanities department could help to train vocational education teachers. A cultural approach to teaching cannot be implemented in vocational education centres and in teacher training programs unless the groups responsible for the programs are able to call on the active, ongoing participation of teachers from other subject areas when selecting and arranging content to relate to programs at the school level. For this reason, professionalization will result in training programs that are designed differently. The fragmentation of teacher training programs, which has often been criticized, was detrimental to the establishment of a common culture and shared identity (Lang 1999; Raymond 1998).

Already, several university faculties (medicine, engineering) have proposed integrated training models that draw on classical subjects in a different way. Interesting new approaches have also been suggested by various other faculties involved in teacher training. These approaches deserve our attention, but it is possible to go even further. Formerly, professionality was founded almost exclusively on the academic knowledge specific to the subject taught; the new professionality is based more on professional knowledge in the field of teaching. This is why it appears essential to distinguish between the training of a maintenance engineer, for example, and the training of a maintenance engineering teacher. The goal is not to deny the importance of knowledge of the teaching subject, but rather to ensure that it is included in a new way in training programs for professional teachers of the subject concerned. The subject-specific knowledge acquired, or to be acquired, must be re-centred in terms of its depth, scope and relevance to match course content at the school level. Again, this does not mean that the subject-matter taught should be limited to what is included in the school program; instead, the subject-matter selected for inclusion in the teacher training program should be re-evaluated from the standpoint of professionalization, and completed with elements relating to the history of the subject, its epistemology and its relationship to other subjects, which are all elements required by the cultural approach to teaching introduced by the reform of the education system. On this basis, in Québec, the ability to teach would not be based solely on knowledge of the teaching subject, although it would be closely tied to that knowledge (Lang 1999; Tardif, Lessard and Gauthier, 1998). From this point of view, training in the teaching subject must henceforth be related to the practice of the teaching profession and to the place occupied by the subject concerned in the school curriculum. According to Lang (1999: 178; our translation):

> Professionalizing training is designed to build an "ability to teach," in other words a professional culture that integrates knowledge, action outlines, and attitudes; it is intended to overcome the traditional separation between academic, methodological, didactic, practical and other training; it attempts to combat the juxtapositions and disjunctions that are traditional in teacher training programs, between various institutions (universities, trade schools, placement locations, work locations), functions (knowledge production and dissemination, identity and ability construction, etc.), stakeholders (teacher-

researchers, "institutional" instructors, on-site instructors, peers), evaluation methods, and so on. It necessarily involves confrontations between stakeholders whose institutional positions, competencies and concerns differ; professionalizing training attempts to create new links between traditional sources of training.

2.2 Teaching From a Cultural Perspective

2.2 Teaching from a cultural perspective

In the educational policy statement *Québec Schools on Course* (1997b), the MEQ stressed, in particular, the cultural dimension of the reform. In order to raise the cultural level of the school curriculum, the document proposed that "to ensure that the teaching of cultural content is not left solely to teachers, it will be set out explicitly in the revised programs of study" (1997b: 13). The document also stated that "these subjects will be taught from a cultural perspective" (1997b: 13). This "cultural perspective" will affect the role played by teachers in complex, far-reaching ways, and by extension will also affect the providers of both initial and continuing teacher training programs. What exactly is a "cultural perspective"? And what are the consequences for teacher training? In order to answer these questions, we must first examine the scope and meaning of the word "culture."

2.2.1 The concept of culture

Any attempt to clarify the meaning of the word "culture" quickly leads to a large number of definitions. Kroeber and Kluckhohn circumscribed an extended semantic field, listing no fewer than 160 different definitions of culture between 1871 and 1950 (Simard 1995), and this does not even take into account the proliferation of discussions of culture over the last 40 years. Although the range of definitions can be initially bewildering, the concept of culture can, in fact, be dealt with quite simply.

2.2.1.1 Culture as an object

First, when defined as an object, culture can be understood in a descriptive sense to mean a construct, or in a normative sense to mean an object of desire.

The descriptive sense: primary culture and secondary culture

The concepts of primary and secondary culture as defined by Québec sociologist Fernand Dumont delimit two meanings of the word "culture" when considered as a construct. For Dumont, "primary culture is a given. Mankind relates to a familiarity of meanings, models and shared ideals: plans of action, customs, a whole network of meanings that allow us to spontaneously recognize our place in the world and in the home" (Dumont 1968: 51; our translation). In this sense, primary culture is a construct that is assimilated by osmosis, and has a collective, anthropological meaning that corresponds to the lifestyles, behaviours, attitudes and beliefs of a given society. This conception of primary culture, also called "sociological" culture, refers to "the set of characteristic features of the lifestyle of a society, community or group, including those aspects that can be seen as the most everyday, the most trivial or the most 'inadmissible' " (Forquin 1989: 9; our translation).

When culture as an object is defined in a descriptive sense, it can be understood differently. It acquires a meaning of distance, of a second way of regarding reality, in other words what Dumont calls secondary culture: "When I speak . . . I take responsibility for a certain gap between the primary meaning of the world

as disseminated in the praxis of my collective context and a secondary universe in which my historical community has attempted to give itself, as a horizon, a coherent explanation of itself" (Dumont 1968: 41; our translation). Secondary culture refers to the set of works produced by humanity in order to comprehend its own place in the world.

For Dumont (1968: 41; our translation), culture contains both the first and the second meaning: "The distance and the two poles that define it are what we must understand by the concept of 'culture,' which is constituted by two opposing federations of symbols, signs and favoured objects, from which the world takes its form and meaning for a community of conscience." In the descriptive sense, culture as an object includes the world that we bear within us by a more or less conscious process of impregnation, and the meaning that we give to the world by distanciation.

The normative sense: the cultured individual

Culture as an object can also be viewed from another perspective, in which case it takes on a desired, or normative meaning. In this situation, culture refers to the ideal of the cultured individual we should all strive to become. Globally, we can refer to "the set of dispositions and characteristic features of a 'cultured' mind, in other words the possession of a wide range of knowledge and cognitive skills" (Forquin 1989: 9; our translation). The contemporary form of humanism open to the sciences, as promoted by the Parent Report, promotes the ideal of the cultured person. Several public debates oppose different conceptions of the cultured individual, and also focus on the meaning to be given to the expression "general knowledge."

Schools maintain close ties with both the descriptive and the normative perspectives of culture viewed as an object. As organizations located at precise points in space and time, schools form part of the primary culture. In addition, as institutions devoted to an understanding of the world, schools are a genuine centre for cultural integration, a circle of secondary culture (Dumont 1971). Finally, as a site for work on and the promotion of a particular type of secondary culture objects that have been deemed desirable, schools aim to instill the dispositions and qualities of a "cultured" mind. In other words, culture is simultaneously the source, substance and ultimate objective of schools (Forquin 1989). The definition of a cultured individual is not, of course, an objective process, but rather a normative one. The question must be debated by society as a whole, which must select the objects of secondary culture that will enter into the desired makeup of the cultured individual. Some people will propose a return to great classical culture, some will emphasize the importance of science, and others will opt for a corpus that is more in harmony with contemporary culture—and other solutions are also possible.

2.2.1.2 Culture as a relationship

The proposal to introduce a "cultural perspective" into education requires us to continue our exploration beyond the viewpoint of culture considered as an object. It is suggested that teachers change their relationship to knowledge, or in

other words teach differently (Montférier 1999). The hypothesis put forward by Charlot (1997) appears to us to offer a promising explanation to explain what is meant by a "cultural perspective." For Charlot, knowledge, which we can call "culture," is not merely an object of understanding but first and foremost a relation. This hypothesis affects teachers directly.

According to Charlot (1997: 91; our translation), "analyzing our relation to knowledge means studying the individual who is required to learn, in a world shared with others: the relation with knowledge is a relation with the world, with oneself, with others. This conception of a triple relation with knowledge is interesting because it opens up the possibility of considering culture not as a disembodied object of knowledge, that students acquire or fail to acquire, but as a relation with the knowledge to be constructed. From this standpoint, the goal is not to draw up an inventory of cultural objects to be mastered, nor to evaluate the quality of those who possess or do not possess them, but rather to see the action of culture in the school as the building of a relationship, in other words the establishment of a set of situations and relations into which the student enters to establish a relationship with culture" (Charlot 1997: 84). The relationships with the world, with oneself and with others constitute three inter-related dimensions that allow culture to emerge (or not to emerge) in the school. From this point of view, "*reconciling schools and life through culture*" becomes the essential task of the teacher (Montférier 1999: 12; our translation).

The relationship with the world

Individuals are separate from, but in a constant relationship with, the world. The world forms a part of each individual. Children are not empty vessels, but are the inheritors of the world and the bearers of a constellation of meaning. Individuals do not apprehend the world as it is; rather, the world is already permanently present in them, through the categories of language by which they are constituted. Individuals also interiorize various representations of class, sex roles, standards of conduct, inclinations, etc., that colour their whole being. Their personal trajectory and the particularities of their context will also help to transform them. For a given individual, a particular event, person, or place may be significant, whereas for another it will have no meaning. This is why culture can be considered as a relationship with the world and has significance only in the way in which the world is experienced by the individual (Zakhartchouk 1999). In a mass teaching context, in which students display a wide range of characteristics, culture is experienced differently by each individual. For example, cultural practices concerning the type of music listened to by teenagers in a given group (rap, techno, etc.) can differ widely from those of the music teacher, trained in classical music.

The relationship with oneself

Our relationship with knowledge, or culture, is also a relationship with ourselves: it includes a dimension of identity. As mentioned by Dumont (1997: 154; our translation), "self-discovery is possible only through the action of culture." Access to the self can never be obtained intuitively and immediately. Self-knowledge is always an understanding founded on the culture and history that bear it. To understand oneself means to understand oneself through

culture, through a horizon made up of signs and meanings (Simard 1999). However, it is possible either to recognize oneself in the world proposed by the school, or else to feel like a stranger. Learning becomes significant for an individual who is able to create links with his or her context, concerns, and points of reference. Through learning, students progressively build up an image of themselves. If success at school allows certain students to reinforce their self, failure leads others to seek meaning and a refuge elsewhere, where they do not feel excluded. The various competencies that students acquire, inside and outside the school, allow them to negotiate a form of "distinction" (Bruner 1996). Success or failure can lead some students to become migrants, because they no longer recognize themselves in their community after integrating the values of the school, or to leave school, because they live more intensely and harmoniously in their community in terms of their relationship with themselves (Dubet and Martucelli 1996).

The relationship with others

The relationship with knowledge is also a relationship with others. The self is always in a relationship with others, and the identity dimension is linked to the relational dimension. Understanding a mathematical theorem means integrating knowledge (relationship with the world), feeling intelligent (relationship with self), and also gaining access to a world shared with other people possessing the same knowledge (relationship with others) (Charlot 1997: 85). If a student, in a particular year, feels that he or she is getting on well in mathematics with a particular teacher, but hates mathematics the following year, the explanation can probably be found in this triple relationship, according to which a class becomes interesting or boring, as the case may be, depending on whether or not a relationship with the world (mathematics), a relationship with others (the teacher) and a relationship with self (success or failure) are properly established.

In short, we cannot examine the role of culture in schools without also considering the relationship with culture: "If knowledge is a relationship, then the value and meaning of knowledge come from the relationships that are implicit in, and inducted by, its appropriation. In other words, knowledge has meaning and value only with reference to the relationships it implies and that it produces with the world, with oneself, and with others" (Charlot 1997: 74; our translation). If culture is a relationship, then the important question for teachers is education and the transformation of the relationship within the school. Although every teacher, too, has a relationship with the world, an identity relationship and a relationship with others, the relationships can differ greatly from those of the individual students entrusted to the teacher's care, who also have a particular vision of the world, of themselves and of their teacher. The teacher's task will be to create, through the mediation of cultural objects, a relationship with each student so that a new relationship with the world is formed and the students become cultured individuals.

2.2.2 The role of the cultured teacher

Teachers are given, by society, the task of instructing and educating, in other words of forming cultured individuals (if culture is seen as a desired object) who will maintain a new relationship with culture, that is to say, with the world, with themselves and with others. Teachers are the bearers of culture (primary and secondary), they are part of a relationship with the world, with themselves and with others (students, other teachers, the community), and they seek to bring students to distance themselves from the primary culture in order to gain access to the desired form of secondary culture.

However, culture as an object and our relationships with culture are no longer what they used to be. They have changed gradually over time, to the point where the role played by the teachers of tomorrow has been entirely transformed.

For a long time, the task of a teacher was to transmit a relatively stable and unified heritage of knowledge, values and conduct. Through schools, the community was able to form children in accordance with an image that corresponded to a shared ideal (normative culture). The model was highly coherent, and schools ensured that it endured and was efficiently transmitted by exercising systemic and systematic control over their student population. The nature of the heritage transmitted by schools was not questioned and, although there could be a gap between the school (secondary culture) and the surrounding community (primary culture), the proposed cultural ideal, rooted in a long tradition, was considered valid by the majority. There was a kind of symmetrical relationship between the culture proposed in the school and the culture to which the members of society aspired. Teachers reflected the culture and values promoted by the community. As the official holders of a culture valued by all, teachers could easily use their power and prestige to ensure that its content was transmitted.

Over the years, this world has collapsed. Primary culture is no longer homogeneous. With mass education and the transformation of society, the composition of the school population has been modified and students no longer share the same heritage. Secondary culture has also undergone a radical transformation. There is no longer one single form of knowledge that allows a comprehension of the world; the number of subject areas has increased, each offering a new way of seeing reality. In addition, the quantity of available knowledge has multiplied exponentially. Within a given subject area, interpretations are increasingly coming into conflict. The period of the all-encompassing explanation has come to an end (Lyotard 1985). There is no longer a consensus on normative culture. The great humanist culture has seen its hegemony called into question, just as the consumer-based, banalizing vision of culture, in which everything is of equal value and is dissolved in the prevailing culture, is constantly criticized. And this has consequences for the role of teachers as the agents of cultural transmission, in other words their relationship to culture, or the world, their relationship with themselves and their relationship with others. In short, there "is no longer a unanimous cultural stockpile, a delimited set of knowledge and models of conduct of which teachers are the

respected holders and confident transmitters, for which they feel responsible for the society that surrounds them, and which they represent by their profession" (Dumont 1971: 53; our translation). Their relationship with the world, formerly so stable, continues to evolve given the proliferation and transient nature of new knowledge and conflicting interpretations as to what constitutes valid culture. Similarly, the image reflected by students, parents and society is changing; lastly, the teachers' universe is no longer necessarily shared by their students, placing them in an unbalanced situation in terms of identity.

If teachers can no longer rely on a relatively uniform primary culture, no more than on a unitary, permanent secondary culture, or on a generally valued normative culture, then how can they define their role as cultural agents? In other words, what will the function of tomorrow's teachers be in terms of the mission of instruction and education they are expected to pursue? Zakhartchouk (1999) defines their function in general terms as a "cultural broker" with reference to the brokers who help negotiate obstacles, accompany a journey or reach new destinations. In short, teachers are seen as helping students to construct meaning by establishing new relationships with themselves, with the world and with others.

In a forward-looking article, Dumont (1971) indicated several interesting reference points. For Dumont, the teachers of tomorrow have to be inheritors of culture, critics and interpreters. However, he stated that this vision would be hard to implement, largely because of the ambiguous relationship we maintain, as a society, with our origins, as though, for the last 30 years, we had been trying to live in a present shorn of its past. As it turned out, the guidelines he set out in 1971 to face a new, complex, shifting context were never successfully incorporated into school practices and teacher training programs. The education policy statement published in 1997 by the MEQ reaffirmed the cultural school proposal and brought it back onto the agenda, suggesting that teachers become cultural brokers, in other words the *inheritors*, *critics* and *interpreters* of culture.

2.2.2.1 Teachers as inheritors

As inheritors, teachers belong to the world that forms them and with which they maintain a relationship that progressively forges their identity. The world is not made up solely of the primary culture (languages, customs, lifestyles) from which it stems but also of a distanciation from it (secondary culture). Teachers, like students, are inheritors. They must establish a distance between themselves and their world, and understand the origin, nature and limits of their representations. Teachers must make students aware of their inheritance, as though it were doubled. To achieve this, teachers must take stock of the distance that separates them from the relationship with the world inherited by their students. If there is no shared, unifying synthesis, teachers must re-establish a form of continuity to re-weave meaning into the cultural fabric that is torn between their world and the world of their students. As cultural brokers, their role involves restoring continuity and creating transitions: continuity between the present and the past, continuity between knowledge and the world, continuity between forms of knowledge and continuity among human beings

(Simard 1999). The teachers of tomorrow must have a sense of origin and understand where the modern world comes from. They must make links between the various types of knowledge that circumscribe the world. They must also understand how an interpretation of the world is constructed, and must have penetrated the epistemology of the subjects they teach. They must understand what is essential in a human being, despite the differences existing among individuals.

2.2.2.2 Teachers as critics

As critics, teachers have learned (and will continue to learn throughout their careers) how to distance themselves from their primary culture, and also from their secondary culture. However, to be critics, they must first know what they have inherited, which will enable them to unmask the assumptions and prejudices of their primary culture. They must also know that knowledge is a construct and that, as a construct, it is limited, transitory and replaceable, but nevertheless essential for establishing continuity and positioning themselves in the world. They know, from studying consumer culture, that disparate, interchangeable data have never sufficed to make a culture. They know that intellectual education is not synonymous with cultural acquisition.

2.2.2.3 Teachers as interpreters

As interpreters, teachers are responsible for transposing culture. As brokers of meaning, they form part of the world they interpret and, in turn, seek to make it relevant for others. This is why teachers select, on the basis of the group of students concerned, the elements of heritage they consider to be indispensable and pertinent for those students. They are a sort of hermeneutist or decoder, both for the subject they teach and for their group of students, to help them travel into new spaces. Pedagogy, as an interpretational activity, is based on what the hermeneutists formerly called *subtilitas* (Simard 1999), in other words less on technique and more on tact, less on geometry and more on subtlety, less on method and more on flexibility; in short, it is based on judgment and sensitivity.

2.2.3 Training cultured teachers

The concept of the cultured teacher, acting as a cultural broker and the inheritor, critic and interpreter of culture, can be used to orient discussion and action in a particular direction, in particular concerning teacher training approaches. In fact, we should aim for a point in the future when we are able to say that teacher training includes a kind of "professional conditioning," not in the common negative sense, but in the sense that future teachers will possess cultural training that sets them apart from ordinary citizens and from other professionals. To provide this training, we will not only have to determine a specific culture as an object, but also develop a particular relationship to culture among future teachers, a kind of shared awareness among teaching professionals.

Training cultured teachers obviously involves equipping them with various objects of culture and different types of knowledge essential to their cultural training. These objects of culture will relate, first, to various subject areas: languages, science and technology, the arts, the social sciences and personal development. They will also relate to pedagogical and didactic knowledge, such as approaches, methods, means and techniques linked to teaching/learning, to evaluation and to class management.

Nevertheless, however essential this subject-related, pedagogical or didactic knowledge is, it will not be sufficient to ensure that the learning is transmitted to the students. Future teachers must be taught to regard their subject from the perspective of a professional.

The teaching profession cannot afford to ignore the relationship with others, in other words students, parents and the community; we cannot train teachers as though their profession involved only knowledge, while considering the presence of others as a negligible factor.

Furthermore, every concept or piece of knowledge has a history which, when known by the students, can either anchor or block their understanding (Giordan 1994). The most probable negative consequence of denying the relationship between students and knowledge will be resistance, exclusion or student drop-outs, since students will not recognize their place in the teacher's world. This is why it is important, in the process, to provide future teachers with cultural training, to make them aware of the importance of the relationship of students with objects of culture. For this reason, teachers will not only have to understand their subject, but will also, according to Shulman (1987), have to possess a pedagogical knowledge of their subject, in other words take others, and therefore students, into consideration as they teach objects of culture. The development of a truly pedagogical culture, i.e. one that is linked to the work of the teacher but also to the students, must be considered as an essential element in the training of future teachers.

It would be wrong, as in certain types of new pedagogy, to focus solely on catering to the needs of students, and to ignore the fact that they carry the ideological content of a primary culture from which they must be distanced. Training teachers also involves preparing them to take on the role of cultural broker. They must be trained to bring students to new shores, guiding them critically and helping them get their bearings in the world.

As pointed out by Lussato and Messadié (1986), culture makes us more intelligent by complexification; it helps us see better, comprehend nuances, and better diagnose reality; it is a sort of matrix for understanding the world, oneself, and others. In addition, culture gives us extra possibilities for inventing solutions; it gives teachers new tools that allow them to intervene more effectively.

Let us be quite clear, though: we are not talking here about quiz culture or high-brow culture, but culture as a kind of *sensitivity* that allows us to define a relationship with the world, with ourselves and with others. Without this sensitivity to relationships, culture could be as formal and academic as the most sterile of techniques, and lead to exclusion. This is why we need to do more than add "culture courses," or to include cultural objects, however essential, in a program to develop a cultural perspective for teaching. It is important for a sensitive relationship to culture to be set up by teacher training providers, in other words a sensitivity to their own role, a sensitivity to student teachers, and a sensitivity to the tasks that these future teachers will perform. This sensitivity must be present in all the courses of the teacher training program. This is the challenge posed by an integrated form of teacher training that gives culture the space it requires.

In light of the above, it is fitting to end with a quote from Javeau (1974:52; our translation):

> A redefinition of culture! Will I be the one to propose a new definition? I hope not! But, speaking of culture, I cannot help becoming a little lyrical. I would like to say that, sociology, ethnology and cultural anthropology notwithstanding, culture is this: something that is pleasing to the heart of man. Culture can be as simple as breathing: this is the first thing we must learn or re-learn. Culture is not a medal you wear on your chest, but something nourishing deep in your body.

Chapter 3

Professional Competencies

3 PROFESSIONAL COMPETENCIES

Competencies, or more specifically professional competencies, have been selected as the central element of teacher training, in keeping with the new emphasis on professionalization.

The first section of this chapter deals with the concept of professional competencies. A great deal has been written on this subject over the last few years, and recent research has been used to orient not only professional training in general, but professional training in the field of teaching in particular. As the literature presents a wide range of views on the topic, it is necessary to highlight certain key points. It should be noted that the concept of professional competencies as defined here is based on work in different fields. Research and partnerships will be required to clarify its meaning in the area of teacher training. Generally, a professional competency is applied in a real-life professional setting; follows a progression from simple to complex; is based on a set of resources; is based on the ability to mobilize resources in situations requiring professional action; involves a successful, effective, efficient, recurrent ability to act; is part of intentional practice; and is a project, an ongoing pursuit.

The second section presents the reference framework for professional competencies in the teaching profession, specifying, for each of the twelve core professional competencies, a competency statement, the meaning of the competency, the features of the competency and the level of mastery student teachers are expected to have attained during and by the end of their initial vocational teacher training.

3.1 The Concept of Professional Competencies

3.1 The concept of professional competencies

Much has been written on the subject of competency over the last ten years, and the concept is clearly of great interest. The literature offers a large number of definitions covering a wide range of dimensions, sometimes based on different or even opposing theoretical foundations. Indeed, there is no single acceptance of the term. Definitions differ according to the interlocutor, the standpoint taken and the use of the notion of competency, to the point of being sometimes incompatible (Minet, Parlier and de Witte 1994: 16).

Knowing a concept means knowing its power, in the sense that a concept is a conceptual tool for solving a certain number of problems (Rey 1998: 204). The concept of competency is a relatively new approach that structures the vision of teaching. It is therefore important at this stage to clarify its definition, not only because its meaning in this document differs from that generally used in vocational training, but also because it offers excellent potential, the issues are important and the possibilities for misuse are numerous. To define the concept, its meaning must be explained, and for this to be possible it must be addressed in a variety of ways from a variety of standpoints.

First, it is possible to give an initial negative meaning to the concept of competency, by concentrating on the dangers to be avoided—for example, over-specification and empty formulas or generalities. The first danger is technicism, meaning that ideas and actions may be locked in through excess precision. Indeed, there is no point in replacing lists of knowledge and skills by a competency framework if the framework in question is simply a new way of describing the same, much criticized approach. Teaching by objectives, which reduced learning to the realization of a set of behavioural objectives, led to such a level of fragmentation that the students were no longer able to understand the meaning of what they were being asked to do, and it was by no means certain that the set of behaviours learned actually coincided with the objectives they were supposed to constitute (Rey 1998: 32). This type of approach would simply be a change of terminology, not a fundamental change of perspective. Formulating competencies therefore means, first and foremost, adopting a higher level of abstraction than simply listing the behaviours, performances and skills to be mastered.

The second danger is that competencies may be formulated in such general terms that they mean nothing and do not guide thinking and action in any particular direction. In such a case, competency statements are simply a series of empty formulas that offer no direction whatsoever for the preparation of a vocational teacher training program, and no support for training providers. Those responsible for formulating vocational teacher training competency statements must therefore think instead in terms of defining the type of professional to be trained.

Another way of enhancing our understanding of the concept of competency is to consider what it is not. The competency-based approach is controversial in that it contradicts the conception of teaching as the transmission of

compartmentalized knowledge. This means that the representatives of the different communities concerned (vocational education centres, businesses, universities, etc.) must truly work together as a team to prepare a program of study. Thus, the competency-based approach contradicts an exclusively formal and abstract vision of teaching. A competency is always a competency for action; in other words, it requires something to be done. A sum of knowledge has never been a competency for action (Minet, Parlier and de Witte 1994: 31).

3.1.1 The features of the concept of competency

A certain number of features have been identified in the literature, and some are extremely important in understanding the concept of competency.

☛ ***Competency exists in a real-life setting***

Every action or thought occurs in a context. The presence or absence of context cannot therefore be used as a means of distinguishing between competency and skill. Unlike skills, which can be exhibited in a situation where only a certain number of variables are present (for example, in simulations or laboratories), competencies are "contextualized," in the sense that all real-world constraints enter into play. Le Boterf (1997) drew a distinction between competencies and skills based on the presence or absence of a set of real action variables; otherwise, the terms are virtually synonymous. Competencies are exercised in a professional situation, whereas skills are actions that take place in a controlled or, to some extent, artificial context.

☛ ***Competency follows a progression from simple to complex***

By using the actual context as a distinguishing factor, it is possible to remove an ambiguity identified in the work of many authors who claim that competencies are more general than skills. Rey (1996: 28), for example, states that behaviour-competencies are on the same level as skills. "Being able to classify given names in alphabetical order" (1996: 28) is a behaviour-competency—in other words, a skill. A competency can therefore be situated at the same level of simplicity as a skill, just as a skill can be situated at a high level of complexity and require lower-level skills for its application. The distinction between competency and skill appears to lie more in the presence or absence of a real context that involves all the variables of the professional activity. From this standpoint, the argument to the effect that competencies are *a priori* complex and skills simple is hardly a sufficient basis for distinguishing between the two. However, in the case in question here, namely initial vocational teacher training competencies, an intermediate level would appear to be needed, in order to avoid long lists of competency statements that are so general as to be of no use in guiding action.

☛ ***Competency is based on a set of resources***

Competent people identify and use resources in a context of action. The resources in question may be knowledge, skills, attitudes and other more specific competencies applicable in a particular context. These resources can

also be found in an individual's environment—for example, coworkers, resource people, data banks, specialist literature, instruments, apparatus and so on. However, while competent people use these various resources, their competency depends on more than that. Competency is not just a particular knowledge, skill or attitude, but is expressed when an individual uses those resources in order to take action.

Moreover, while a skill can easily exist without the knowledge on which it is based, a competency necessarily requires the knowledge underlying the action taken. A bricklayer who is able to carry out certain actions but is unable to grasp the underlying knowledge can be described as skilled, but not as competent. Just as knowledge does not guarantee skill, skill does not guarantee professional competency.

☛ ***Competency is based on the ability to mobilize resources in situations requiring professional action***

While individuals must possess knowledge, skills and attitudes in their pool of resources in order to be considered competent, competency also requires something more, namely a context. A skilled person is able to mobilize resources, whereas a competent person is able to do so within a real time and space, and not just in a simulated or controlled time and space. The requirement of context means that competent people, in the heat of the action, must be able to recognize the demands and constraints of the situation, identify the available resources and take action by incorporating, combining and orchestrating those resources in a way that is relevant to and effective in the circumstances. Competency therefore lies in the ability to construct, not to apply. The ability to act in the heat of the moment requires judgment, presence of mind and shrewdness. Teachers can therefore be described as *interpreters*, in that they perceive a situation in a certain way, give it meaning and, where necessary, adapt, invent or improvise to deal with it.

☛ ***Competency is part of intentional practice***

Competency as a performance allows individuals to achieve objectives considered desirable. Teachers are responsible for helping students to develop certain competencies required by a program of study and for instilling in them certain knowledge, skills, values and attitudes that society regards as vital if they are to be free, behave well in society and practise their chosen trade in accordance with the prevailing rules. "Competency can be more than a set of objectively observable movements; it is also an action on the world, defined by its social or technical utility—in other words, it has a practical function" (Rey 1998: 34; our translation).

☛ ***Competency is demonstrated as a successful, effective, efficient, recurrent performance***

A competency is a potential for action through which problems specific to a given family of situations can be identified and solved. In a real world context, a

competency translates into a successful, effective, efficient and immediate performance. A competency is also applied recurrently in different situations, thus showing that the skill is stable. The effectiveness and efficiency of a competent individual are not the result of chance and are not temporary.

Competent people act efficiently, in other words in accordance with expected standards. However, there are many different ways of achieving goals. A number of methods can be used, some more effectively than others. An expert's efficiency can be regarded as a kind of ideal, but the real efficiency of a competent individual is not necessarily comparable to that of an expert. A competent individual is someone who is able to mobilize resources in the heat of the moment, as a true professional would reasonably have done in similar conditions. The performance threshold must therefore be established not on the basis of an expert model, but according to what a professional could reasonably be expected to do in the same circumstances. Clearly, then, newly graduated vocational teachers should be expected to perform at the level the system would expect of any person to whom it is prepared to entrust groups of students, on a regular and permanent basis, so that he or she can help those students become capable of exercising a specialty or trade.

Competent action is also efficient and immediate, as well as successful. The competency has therefore been mastered sufficiently for the action to be taken quickly and with a certain economy of means.

☛ ***Competency is a project, an ongoing pursuit***

As previously mentioned, competencies follow a progression from simple to complex. At the highest level of complexity, there is no real end to the proposed goal. For example, nobody has ever definitively and totally mastered the competency of critical thought. A competency, unless extremely general, should therefore be regarded as a work-in-progress, more of an ongoing pursuit than an achievable goal.

3.2 Core Professional Competencies for the Teaching Profession

3.2 Core professional competencies for the teaching profession

Teacher training directed towards professionalization and a cultural approach to teaching is based on a framework of twelve core professional competencies.

Each competency statement is accompanied by a general description of the meaning of the competency and its features. A level of mastery is also established for each competency. The features relate to the professional actions implicit in teaching, rather than the subject-specific, pedagogical and didactic knowledge required. Although such knowledge is essential as a foundation for the competencies, the MEQ feels it is up to each university to stipulate the knowledge required when developing its training program. The features associated with each competency should therefore be regarded as guidelines for the selection of knowledge objects in the preparation of teacher training programs.

While the competency statements and related features apply to all teachers regardless of their experience, the level of mastery refers to what can reasonably be expected of someone who has just completed his or her training. In this respect, the competency framework does have some limitations. The current literature on continuing education or workplace training tends to concentrate on the professional practices of experienced teachers. Research involving new teachers is fragmented and incomplete, and often tends to focus on deficiencies rather than what they are actually able to do immediately after initial training. At the same time, the competency standards established by various task forces and commissions have not yet been verified by empirical observations and assessments of new graduates in the workplace. Further research is therefore required to help define what can realistically be expected of newly graduated teachers at the end of their training.

It should be noted that the framework suggests no particular weighting for the various professional competencies or vocational teacher training programs. Parameters such as this could eventually be set by the *Comité d'agrément des programmes de formation à l'enseignement* if it feels they would be appropriate.

Lastly, the twelve professional competencies have been grouped together to form four categories in the diagram shown on the next page. The competencies are interdependent, in that they must be connected if they are to produce a professional teacher. Similarly, they must be implemented in an interactive as opposed to a linear fashion. They are therefore not an ordered set of operations, but steps that have an impact on one another and that change as the elements involved are taken into consideration.

1. To act as a professional inheritor, critic and interpreter of knowledge or culture when teaching students.
2. To communicate clearly in the language of instruction, both orally and in writing, using correct grammar, in various contexts related to teaching.

3. To develop teaching/learning situations that are appropriate to the students concerned and the subject content with a view to developing the competencies targeted in the program of study.
4. To pilot teaching/learning situations that are appropriate to the students concerned and to the subject content with a view to developing the competencies targeted in the program of study.
5. To evaluate student progress in learning the subject content and mastering the related competencies.
6. To plan, organize and supervise a class in such a way as to promote students' learning and social development.

7. To adapt his or her teaching to the needs and characteristics of students with learning disabilities, social maladjustments or handicaps.
8. To integrate information and communications technologies (ICT) in the preparation and delivery of teaching/learning activities and for instructional management and professional development purposes.
9. To cooperate with school staff, parents, partners in the community and students in pursuing the educational objectives of the school.
10. To cooperate with members of the teaching team in carrying out tasks involving the development and evaluation of the competencies targeted in the programs of study, taking into account the students concerned.

11. To engage in professional development individually and with others.
12. To demonstrate ethical and responsible professional behaviour in the performance of his or her duties.

COMPETENCY 1

COMPETENCY STATEMENT
To act as a professional inheritor, critic and interpreter of knowledge or culture when teaching students.

MEANING

The cultural approach to teaching is one of the two general orientations of this document. Culture must therefore permeate all core professional competencies for teachers. As a result, many competency features contain explicit references to the cultural aspect. However, to highlight the importance of cultural knowledge (both subject-specific and curriculum-related) in the field of education, it is also useful to look at how this basic goal of teacher training can be expressed even more explicitly in a professional competency.

It has often been said that everything related to culture occurs outside schools—for example, in museums, at the theatre, in performance venues, and so on. Clearly, such places are excellent sources of cultural expression, but they are not the only ones. Schools, as secondary cultural venues, also provide excellent cultural education for their students. It is often during the long period spent at school that students progress from primary culture to secondary culture. Schools therefore play a major role in developing cultural awareness.

Secondary culture is obviously present in program contents. Programs propose different standpoints that enable students to understand various facets of the world and distance themselves from their primary culture. However, culture is much more than the content selected by the school. Teachers cannot provide appropriate support for learning activities if their knowledge does not extend beyond the limited content indicated in the program. If this were the case, they would teach mechanically, slavishly following textbook or program content. They could not expand upon the official content or create situations tailored specifically to the context of their class. In other words, they would not be able to adapt their teaching to the group in order to make the learning significant for their students.

The danger of technicism in teaching lies precisely in this aspect; teachers with insufficient knowledge of the subject matter or objects are unable to understand or relate content elements, either in their lesson planning or in their actual teaching, to help the students establish links between elements of knowledge and hence give meaning to their learning.

Technicism has its reverse side, namely academism. Here, teachers who have access to a wide range of knowledge do not themselves establish links between elements of that knowledge, their own secondary culture and the secondary culture of the students they are teaching. The title of a book written in French by Saint-Onge (1993), which translates as "I Teach, But Do They Learn?" is directly relevant to this problem; in academism, the

role of the teacher is merely to transmit information, as though knowledge of a content automatically means the students have acquired learning. If the students do not understand, or if they do not transfer their learning to other contexts, it is therefore their own fault. The teacher's knowledge becomes a necessary and sufficient condition for teaching. This unfortunately widespread vision of the profession clearly has some significant deficiencies. It is for this reason that the notion of "cultured teacher" involves not only knowledge by the teacher of the secondary culture objects in programs and beyond, but also—and especially—the teacher's ability to create a new relationship with culture for the students. It is undoubtedly here that the challenge of the profession lies. Teachers, even if they have access to university-level knowledge, must be able to structure that knowledge for a specific audience, namely their students.

There is therefore a gap between technicism and academism—the space in which the teacher works—that needs to be explored. While technicians of teaching do not have the cultural knowledge required to connect elements of knowledge, academics are unable to relate to others and create significant teaching/learning situations.

Although subject-specific knowledge and program-related knowledge is clearly important to the act of teaching, very little empirical research has been done to show its impact on the practice of teaching (Grossman 1991a and 1991b; Shulman 1986a and 1986b; Byrne 1983). This central aspect of the pedagogical act that Shulman (1986a) refers to as the *missing paradigm* is still neglected by researchers in the field of education. Even so, some studies have shown how the teacher's subject-specific and program-related knowledge can affect teaching practices. The primary impact appears to be "in the teacher's mind" and hence on specific professional activities such as planning, goal selection, content and activity selection, freedom from basic textbooks, the type of examples used, links with everyday problems and with other fields, other programs and other levels, and the design of evaluation (Martineau and Gauthier 1999).

FEATURES

- Situates the discipline's basic benchmarks and points of understanding (concepts, postulates and methods) in order to facilitate meaningful, in-depth learning by students.

Teachers, if they are to play their role as brokers of culture (Zakhartchouk 1999), must be able to structure secondary cultural knowledge, both university-level and school-level, within programs in such a way that students are able to understand it. At the same time, they must support the students as they learn. They must be able to situate the contribution of university-level knowledge to the understanding of subject-specific program content, so as to establish links between subject-specific knowledge and school-level knowledge. At the same time, school-level knowledge or subject-specific program content become resources that are used to help the students develop competencies. For this to be possible, teachers must act as inheritors—in other words, they must understand and translate fundamental benchmarks, concepts, postulates and methods. These points have all been confirmed by research on the subject-specific and program-related knowledge of teachers and its contribution to their teaching practice.

A number of researchers (Gudmunsdottir 1990; Wilson and Wineburg 1988; Hashweh 1987; Leinhard and Smith 1986) have shown that the level and quality of knowledge of the subject's substantive (concepts) and syntactical (methods) structure have an impact on how teachers present their material to their students, in particular with regard to didactic planning and content selection. These same authors also note that teachers whose original training is least related to the content they are required to teach are also those that tend to follow textbooks most slavishly. Reynolds et al. (1988) report similar results, stating that the teachers with the soundest backgrounds in their subjects are also the most likely to distance themselves from textbook content structures and adopt the most flexible approaches. Lastly, Hashweh (1987 and 1985) showed that the teacher's knowledge of the subject may have an impact on the quality of the examples used and the explanations given, and on the teacher's critical attitude to the basic textbook.

It is also important to note that an accumulation of subject-specific knowledge does not necessarily mean a coherent understanding of the discipline (Wilson and Wineburg 1988). Just as a pile of bricks does not constitute a house, an accumulation of unrelated knowledge does not constitute an integrated, flexible understanding of the subject, and certainly does not facilitate learning by the students.

Some researchers have found a difference in the way a given subject is taught, depending on the teacher's knowledge of the program. Carlsen (1988), for example, showed that, when teachers are less familiar with program content, they are more inclined to adopt an approach focused on individual assignments, and to control discussions and monopolize classroom time. They also tend to limit opportunities for questions from the students. Grossman (1990) pointed out the importance of teachers being familiar not only with the horizontal themes at a given program level, and the links between those themes, but also with their vertical links to what the students have learned in previous years, and what they will learn in the future.

If teachers are to adopt a cultural approach to teaching, or teach subjects from a cultural standpoint, they must have a more extensive subject-specific knowledge of the elements they will be teaching in the program. Their understanding must go beyond a simple accumulation of the facts to include structured points of reference that will help the students form their own links between elements of knowledge. Such an approach requires not only mastery of program content elements, but also horizontal and vertical integration of those elements.

☛ Adopts a critical approach to the subject matter.

The secondary culture inherited by teachers enables them to understand the world and make it significant for their students. It also allows them to take a critical approach to their subject matter and to the course content. A critical approach means that teachers may judge the statements contained in their subjects and programs, and estimate their impact in the classroom context.

Scientific, technical and professional disciplines and school programs are dependent to some extent on the people who develop them. They are cultural products situated in a historical context. In this respect, scientific disciplines cannot be regarded as unchanging, objective elements that express reality as it truly is. Instead, they are social

constructs with their own history, evolving controversially within schools of thought. They show reality not as it truly is, but as they construe it. The same applies to school programs, which also change over time and are the subject of debate. In this respect, neither university-level knowledge nor school-level knowledge can be regarded as truths that are independent of the academic or social contexts in which they were created (Tom 1997 and 1992).

It is for this reason that cultured teachers must not limit their role simply to transmitting content produced outside themselves, as though such content were neutral. Not only must they appropriate that content and understand its structure, but they must also grasp its limits and understand the conditions in which it emerged. In this respect, teachers must be able to make a critical reading of both the subject matter and the program.

Cultural teaching requires an understanding of the genesis and epistemology of the subject matter or trade. In the classroom or workshop, teachers must implement teaching/learning situations that allow diverse groups of students to understand subject-specific contents in order to develop competencies that they will subsequently be able to apply in a variety of contexts. This goal of competency development often means that teachers must establish links between their own subjects and other subjects, adopting what amounts to an interdisciplinary approach. Within a teaching team, teachers must therefore be able to identify the contributions of different subjects to the solution of a given problem. They situate their own subjects, with their own specific methods and questions about reality, but are also open to other subjects with their own requirements and methods.

- Establishes links between the secondary culture set out in the program and the secondary culture of the students.

Teachers who play the role of cultural interpreters for their students establish links between the secondary culture set out in the program and the secondary culture of the students, in order to facilitate the students' quest for meaning.

To do this, teachers must try to understand the connections established by the students with the program's cultural objects. They apply teaching/learning situations that allow the students to become aware of their primary culture and of their prejudices with regard to the cultural objects. They then link this heritage from the students' home environments to social agents (family, media, advertising, leisure, etc.) and to the acculturation process, in order to identify continuities and ruptures in the meanings proposed by the subject-specific content, thus clarifying their understanding of the students' relationship with that content. This enables them to estimate the types of bridges required to ensure that the program content broadens the students' existing points of reference. By considering the "other"—in this case, the students—teachers are able to address teaching and learning from a cultural standpoint.

Instead of adopting pedagogy focused exclusively on the students' needs and closed off to the surrounding world, teachers must listen to their students in order to find points of entry from which to build bridges to the program's cultural content. They identify issues or human challenges in the students' remarks and questions concerning their everyday

lives. They transform these questions into springboards or pretexts, initiating searches for information, other points of view or other subject-specific or social measures that will provide answers. They link the students' remarks to works from the scientific, technical and cultural heritage by encouraging exploration of the social and historical origins, features, language, codes, methods and viewpoints that these works have passed on to subsequent generations.

As proposed by Zakhartchouk (1999), cultural mediation by teachers is essential in allowing students to attach everyday objects to the themes, texts and products of the scientific and cultural heritage. This type of mediation is then combined with attentive listening and shrewdness, cunning or even diversion of the students' remarks to identify challenges that push them towards a search for reference elements in the social space. By encouraging the students to step back from their culture of origin and from everyday cultural consumer objects, teachers are able to highlight common points and elements shared with the subject-specific work or social practices proposed in the program.

Cultural mediation by the teacher, in a dynamic balance between rupture and continuity, ensures that languages and codes regarded by the students as unfamiliar or even difficult and worrisome are made accessible and meaningful. Teachers must bear in mind what the students "already know," and must also use everyday practices (leisure, consumption, health, media consultation, etc.) and the products (objects, texts, interpersonal relations) that they engender to anchor, motivate and direct the students to learn new languages and codes, thus transforming those practices into learning goals and new applications.

The students can also be given access to unfamiliar elements by identifying and critically analyzing the economic, historical and social aspects of the media and consumer products they use. The origins of certain programs, characters and popular games, their themes, production issues and history, manufacturing technologies, the extent of and reasons for their popularity and their marketing parameters all offer an interesting basis for a study of the evolution of cultural productions and the social contexts in which they exist, from different subject-specific standpoints.

- Transforms the classroom into a cultural base open to a range of different viewpoints within a common space.

Teachers work with their students to build a "classroom culture," common reference points, an identity, values, means and communication methods that are shared and valued by all students. To do this, they encourage the students to express and listen to their points of view and sources, and help them establish common forms of understanding. When this occurs, the teacher identifies the sources of misunderstanding or conflict and considers their meaning and individual and collective scope (inside and outside the classroom) with the students. Teachers could, for example, invite students to describe situations from different standpoints, or put themselves in the shoes of other students. They can then help the students to highlight their differences and understand the contribution those differences make to the quality of learning and classroom life. They link these discussions to social situations in which different individual contributions lead to understanding, pleasure, discovery and achievement.

Teachers must also maintain a critical attitude to everyday "facts." This means considering them from other standpoints, encouraging the students to critique them, working with the students to find ways of addressing questions raised during discussions and defining the limitations and potential of the available knowledge.

The notion of different standpoints is especially relevant to vocational training, where the "classroom" may be a traditional schoolroom, a workshop, a laboratory or even an industrial workplace.

☛ Casts a critical look at his or her own origins, cultural practices and social role.

Cultured teachers are aware of their origins and progress, and of the influences that have shaped their identity and cultural practices. They assume their own culture and recognize both its possibilities and its limitations. They critically examine their own cultural practices and take action to enrich and diversify them. This "stepping back" from themselves and their own acculturation makes them aware not only of differences among their students, but also of the many influences that have shaped them.

The teacher's role is not limited to didactical and pedagogical learning-related issues. As social players, teachers are also core elements in certain social, political, economic and organizational issues that have an impact on their classes and affect both their role as teachers and their behaviour towards the students. The decisions they make on a daily basis are not just educational in nature; they also have a social, political and economic meaning. It is for this reason that teachers cannot play their role properly unless they think about these aspects of what they do. They must establish a relationship between ideas, pedagogical forms and cultural history, and between social procedures for instruction, education and socialization. They identify ideologies in past and present educational forms, and consider the relationship these ideologies have with the structural elements of society.

LEVEL OF MASTERY REQUIRED DURING AND AT THE END OF INITIAL TRAINING

During and at the end of his or her initial training, the student teacher should be able to:
✔ *understand the subject-specific and program-specific knowledge to be taught, so as to be able to promote the creation of meaningful links by the students*
✔ *exhibit a critical understanding of his or her cultural development and be aware of its potential and limitations*
✔ *exhibit a critical understanding of the knowledge to be taught, so as to promote the creation of meaningful links by the students*
✔ *establish links with the students' culture in the proposed learning activities*

COMPETENCY 2

COMPETENCY STATEMENT
To communicate clearly in the language of instruction, both orally and in writing, using correct grammar, in various contexts related to teaching.

MEANING

While the family is an essential source of elementary oral language skills, schools have an important role to play by introducing students to written language and teaching standardized oral language (Lebrun and Préfontaine 1999). The same is true of vocational education centres, where spoken and written language skills must be sufficient to allow students to interact adequately with others, so as to achieve social integration or practise a trade. The language of instruction must therefore be the main focus in schools, where it must be learned and perfected (Task Force on Curriculum Reform 1997).

However, the need to learn language goes well beyond simple social and economic considerations, because language is basically an object of and dependent on culture, undoubtedly because we communicate better by mastering it well, but first and foremost because the mother tongue (or language of instruction) is not just a means of communication, it is also a heritage that keeps us up to date. We learn it so as to be able to communicate, of course, but we learn it mostly so that we can become aware of ourselves as individuals and attain, if not literary creation, at least personal thinking, itself a form of expression of freedom (Task Force on Curriculum Reform 1997:48). This position is similar to that expressed by the Conseil supérieur de l'éducation (1987), which viewed language not only as an instrument of communication but also as an important introduction to culture and a key to the principal fields of knowledge. In this respect, language is the best possible vehicle for entering into contact with the world, with others, and with oneself.

Thus, all teaching staff, including vocational teachers, play a central role in improving the quality of the students' written and spoken language. The requirement to speak and write correctly is therefore applicable to all teachers, because all teachers are, in their own way, *teachers of written and spoken language* (Lebrun and Préfontaine 1999). All future teachers, including those who hope eventually to teach in the vocational stream, must therefore be able to express themselves well both orally and in writing (Ouellon and Dolbec 1999).

What does "expressing oneself well" actually entail? Ouellon and Dolbec (1999: 6; our translation) note that "good quality language is language that gives access to all facets of knowledge and to the broadest possible range of communication opportunities, language that allows individuals to express their thoughts clearly and add shades of meaning, both orally and in writing." Opinions are very divided on this subject, ranging from the most intransigent form of purism to laxism and misuse (Simard 1990). Ouellon and Dolbec

(1999) agree with the middle road taken by Simard (1990), who defined good quality language as language that allows individuals to communicate easily, both orally and in writing, with other people speaking the same language, and that is marked by the linguistic characteristics specific to given societies. Such characteristics are exhibited mainly as differences in pronunciation and vocabulary (Moreau 1999), an aspect that is clearly observable in vocational education (COFPE 1998: 50).

It is also useful to go beyond the requirement for quality that may be valued by a linguistic community, in order to situate the requirement for linguistic competency within the inherent characteristics of a teacher's work in vocational education. Teachers are expected to use language professionally. Indeed, they are first and foremost models and references for their students. In their spoken language, they must be able to distinguish between the familiar register and the correct register, and be able to move easily between standard spoken language and standard written language, to support the students in their learning. They therefore have the extremely delicate task of evaluating and correcting the language of their students without putting them down or stigmatizing them (Brent 1999). "Rather than limiting themselves to the say/don't say model, why do teachers not take advantage of what their students already know to help them achieve informed mastery of linguistic variations and realize just how powerful the tool of language really is?" (Verreault 1999: 36; our translation). Teachers must also be able to use the right terms for a given circumstance, provide easy-to-understand explanations, ask clear questions and give precise instructions to their students, in both the course content and in their classroom activities and behaviours. A number of authors have noted that the most effective teachers use language economically and functionally, in that they are able to communicate their thinking in a prompt, clear and understandable way to their students (Gauthier et al. 1997).

It should be remembered that, for a vocational teacher, the term "professional use of language" does not involve the same level of mastery as for a language professional such as a writer, linguist or grammarian, nor does it mean employing only the language used by practitioners of the trade being taught. The teacher's linguistic competency need not be of the same level as that of a language specialist, but it must be greater than that of a trade specialist, which sometimes consists in the use of special "codes." Similarly, it must also be greater than that of the ordinary citizen and include usages specific to both the teaching profession and the trade being taught, distinguishing it from that of other professions. There is therefore evidence to suggest that the mastery of a language requires a special effort in vocational education (COFPE 1998: 50).

FEATURES

- Uses appropriate language when speaking to students, peers and business representatives.

While teachers must take the language of their students into consideration, they need not use it when interacting with them. As adults mandated by society to teach a trade and educate their students, their job is to raise student awareness of the importance of proper self-expression, so that ideas can be understood by interlocutors and their value assessed by potential employers. Proper self-expression in no way excludes linguistic variety. On the contrary, "it is important to take into account the distinction between natural

language use and the ability to adjust linguistically to different communication situations" (Ouellon and Dolbec 1999: 18; our translation).

Vocational teachers, in their teaching activities, naturally use language that is specific to their subject matter or area of expertise. For example, they use expressions and terminology that distinguish them from other professionals, and they may even use expressions similar to those they used when working in industry. However, although it is important for them to continue to use expressions and terms that are specific to their trade, teachers must nevertheless, in their teaching activities, express themselves in the same way and with the same care as any other professional.

- Observes rules of grammar and stylistics when writing texts intended for students, peers and business representatives.

As pointed out by Ouellon and Dolbec (1999), teachers must not only have a theoretical knowledge of the rules of written language, but should also put those rules into practice whenever they write texts. It is important to remember that their students regard them as experts, and hence as models. They are experts not only in the skills of their trade, but also in their ability to describe, explain and analyze that trade on paper—for example, in the course notes they prepare for their students.

The students are not the only ones to consider teachers as experts. The same is true of the business representatives with whom teachers negotiate training partnership agreements (COFPE 1998: 51). Business representatives, like other professionals and social groups, notice language skills (Conseil supérieur de l'éducation 1994: 29). As they read the texts written by teachers, they are able to assess the level of care taken by those teachers in training the students their companies are thinking of hiring. Teaching teams in vocational education centres must therefore make a concerted effort to ensure that the language of instruction becomes a constant concern for all students.

- Is able to take up a position, support his or her ideas and argue his or her subject matter in a consistent, effective, constructive and respectful way during discussions.

The current reform allows teachers and the school team much more freedom in making pedagogical choices. Teachers will be asked to explain and justify the actions they take in their classrooms and in the school. They must be able to argue the meaning and relevance of their choices with students, other teachers, school management, parents and partners in school projects and student services. As a result, they must have access to a number of language resources, including the ability to build and structure a detailed description of their practices and foundations; the ability to explain their practices in clear and precise language, taking into consideration the characteristics of their interlocutors; the ability to highlight the values and aims on which their practices are based by showing how they are expressed in classroom activities and the effects they generate; and lastly, the ability to use notions and arguments drawn from professional literature, along with research data, to support their choices (see Competency 3). In discussions, teachers must also be vigilant, detecting common expressions and terms whose meaning may vary according to the experience and origins of group members. They

must ensure that such differences are brought to light and that the group develops common meanings and reference points.

☛ Communicates ideas concisely using precise vocabulary and appropriate syntax.

According to Ouellon and Dolbec (1999:18), teachers must acquire a more extensive vocabulary and a more varied syntax so as "to be able to satisfy a wider range of needs and communication situations" (our translation). This is particularly true of vocational teachers, who must deal with a wide variety of students within a given group, along with a range of different communication contexts well beyond the boundaries of the vocational education centre.

Vocational student groups are composed of young people and adults. Adults make up two-thirds of total student numbers at the provincial level and up to 80% in the Montréal area, where in many cases the language of instruction is not the students' mother tongue. In addition, "teachers who teach vocational courses must also deal with employers and workplaces, especially when organizing work-study programs or setting up workplace training" (COFPE 1998: 51; our translation).

In vocational education, it is important that certain terms be used accurately. Indeed, the ease with which the students are able to achieve meaningful learning of the course content depends to some extent on the teacher's use of those terms. Appropriate use of terminology, concepts, examples and analogies can promote learning, whereas inappropriate or inaccurate use can hinder student understanding, leading to mechanical or non-significant learning.

☛ Corrects the mistakes students make when speaking and writing.

While vocational teachers should pay attention to the quality of their students' written and spoken language, they must nevertheless demonstrate judgment in this respect. Clearly, when correcting student errors they must apply a pedagogical standard to their written and spoken language that is based on the language of the middle classes. At the same time, however, they must also take into account proper popular language use in society as a whole and in the workplace in particular when defining that standard. Students, too, have their own ways of using language within the social groups to which they belong, and are preparing to move into a new group—the workplace—which in turn, has its own linguistic standards. Thus, while it is important to correct the mistakes students make when writing or speaking, vocational teachers must exercise judgment and tact.

At the same time, it would be useful to raise the students' awareness of any weaknesses in their written and spoken language, by encouraging them to think about, and in the heat of, their own actions (Serre and Ross 1999; Saint-Arnaud 1992; Schön 1983).

☛ Constantly strives to improve his or her own oral and written language skills.

Reading good quality texts can help vocational teachers to discover a wealth of examples that they can use to improve the quality of their language of instruction. Reference works such as grammar books, dictionaries and lexicons are also essential resources for teachers, and the body of literature specific to each subject area and discipline can also be consulted.

However, reference documents such as these are only useful if the teacher already has basic written and spoken language capabilities. It is possible for teachers to improve their language skills with these documents, but only if they are willing and able to question their existing knowledge of a given term or the application of a given rule or exception. They must therefore have a good basic mastery of the language of instruction. Acquiring linguistic competency is part of a learning curve that begins, for some teachers, with an upgrading of their linguistic skills during their undergraduate vocational teacher-training program, and for others with professional development courses. It is a never-ending process.

LEVEL OF MASTERY REQUIRED DURING AND AT THE END OF INITIAL TRAINING

During and at the end of his or her initial training, the student teacher should be able to:
✔ *master the rules of oral and written expression so as to be understood by most of the linguistic community*
✔ *express himself or herself with the ease, precision, efficiency and accuracy expected by society of a teaching professional*

COMPETENCY 3

COMPETENCY STATEMENT
To develop teaching/learning situations that are appropriate to the students concerned and the subject content with a view to developing the competencies targeted in the programs of study.

MEANING

The learning conveyed in a program of study needs to be designed from a socioconstructivist perspective in which the student is the main player in the learning process and the teacher is the guide or mediator. The curriculum reform, by making student learning the focus of the act of teaching, reasserts the most essential elements of the profession, strengthening and supporting them (Bisaillon 1994: 13). The design of teaching/learning situations is based on this philosophy.

Designing teaching/learning situations means creating meaningful situations that allow the students to progress towards mastery of all the competencies targeted in the program. The competency-based approach applied over the last few years in the vocational education sector promotes the integration of learning and the development of complex intellectual abilities by the students. This only happens if the proposed situations allow students to become involved in processes that call on their prior representations and learning, and force them to master new information[1] in order to solve problems or carry out projects relevant to the workplace.

Although vocational teachers are considered to be experts in their trades, they will only be able to design appropriate teaching/learning situations if they also master the subject-specific content of the program, the basic knowledge on which that content is based and the knowledge applicable in the workplace. Mastery of subject-specific knowledge is vital, since it forms the basis of and is derived from the program competencies. Teachers who do not master this knowledge will not be able to design teaching/learning situations conducive to competency development. The ability to identify the foundations on which the components of competencies are based is also important, because they are useful in understanding and explaining the phenomena involved in a given technical process or application. In some cases the foundations[2] will involve mathematical or trigonometric concepts; this would be true of industrial drawing and masonry, for example. In other cases they involve scientific concepts (building electricity, maintenance mechanics, hairdressing, nursing). They may even involve logical concepts; this would be the case for information systems and electromechanics. If teachers have mastered this basic information, they will be better able to design teaching/learning situations that will allow the students to develop complex intellectual skills (Fortin and Vachon 1987). Lastly, the ability to identify practical applications of competencies in the workplace is also

1. "Information" means knowledge, skills and abilities.
2. This basic knowledge may be listed in the program training object grid as general competencies.

important, since it will enable teachers to design teaching activities conducive to the transfer of learning, which is one of the main goals of vocational education programs.

The large number of possible relationships with dynamic, constantly shifting knowledge clearly shows the strong didactic component of this competency (Jonnaert and Vander Borght 1999; Perrenoud 1999). In creating learning situations, the pedagogical team is constantly faced with the question of meaning: the meaning of a competency, the meaning of the program's subject-specific content in competency development, the relationships between program content, university-level knowledge and relevant social practices, the students' preexisting significations that may be meaningful for them in the learning process, in their relationships with one another and with the teacher, and later, in the situations in which the subject-specific content will be applied. Rather than relegating the subject-specific content to the background, as some authors have suggested, the creation of meaningful teaching/learning situations involves identifying its origins and role, situating it in relation to other information, and applying it in a way that is relevant to the students being taught.

FEATURES

- Interprets the aims, competencies and subject content specified in the programs of study.

Before beginning the planning process, the team responsible for a given subject matter must discuss the various aspects involved, to ensure that their efforts are consistent and make a positive contribution to the quality of the training offered to students. The discussions should cover the aims, competencies and content matter specified in the programs of study. They will help the teaching team to develop a shared vision of the program goals and think in more depth about the program's goals and operational objectives. In addition, the team will be able to make connections between competencies, so that they can direct their teaching towards true integration of competencies as stipulated in the programs of study (Ministère de l'Éducation 1993: 2.3). To teach the program components adequately, teachers must draw up long-term plans covering both the logical sequencing of the components and any limitations or requirements imposed by the environment.

To be able to do this, teachers must not only master the program of study, they must also be able to share the teaching of the program's various components with other members of the pedagogical team. This means working together, applying their own personal competencies and reacting favourably to proposals made by other team members.

The team must also set the order in which the program components will be taught, so that learning situations incorporate previously acquired competencies and serve as a basis for the acquisition of new competencies. In setting this order, the team must consider the availability of the physical (classes, laboratories and workshops, equipment, instruments, tools, etc.) and human (professional staff) resources required for the learning activities; often, these resources must be shared by all the teachers of a given subject. Again, this involves working together to ensure that these aspects are taken into account in the plans. Workplace training periods or cooperative education initiatives

should be scheduled at appropriate times within the study plan, so that they have the greatest possible impact on the development of student competencies.

- Plans teaching/learning sequences according to the logic of the content to be taught and the development of learning.

After working with the teaching team on the long-term plan for the program of study, the teachers must then make short-term plans for their own contributions. This involves establishing the sequence in which the program content, usually divided into units, will be addressed, to ensure that prior learning is used as a basis for new learning. An approach must then be selected for presentation of the competencies—for example, the problem-solving approach may be appropriate for developing the competency of repairing equipment, the project-based approach for developing the competency of manufacturing objects, the creativity approach for developing the competency of designing models or objects, and so on. The first step is to agree with the teaching team on the evaluation mechanisms required, and to ensure that the necessary human and material resources are available.

For formative evaluation, teachers include items, steps and strategies in their teaching/learning situations that provide feedback (from the situation itself, from other students or from the teacher) for the student on his or her progress, so that adjustments can be made where necessary. In other words, the student becomes aware of his or her progress, and the teacher then provides support, reviews subsequent activities and, where necessary, builds "catching up" periods into the learning situation.

For summative evaluation, in most cases it is simply a question of using the material prepared by the MEQ. In some cases, however, the teachers and resource people at the vocational education centre will need to prepare new material (see Competency 5).

- Takes into account the prerequisites, representations and special interests of the students when teaching the subject matter.

This competency does not involve using "diagnostic" or other types of tests to check what the students already know in terms of the prerequisites for the development of a new competency. Instead, teachers should explore the conceptions that led the students to construct accurate or inaccurate representations of the concepts, principles, mechanisms and processes of their field. By exploring the students' representations, the teacher is able to develop a pedagogical knowledge of the subject (Shulman 1986 and 1987)—in other words, to anticipate the paths, challenges and learning tasks required to guide the students towards a richer and more complex understanding of the tools and knowledge specific to the field. This type of exploration will be effective only if the teacher uses appropriate methods, for example by placing students in situations where they can apply their representations, and then observing the content of those representations. Where necessary, other simulation exercises can then be proposed to destabilize incorrect visions of the world, together with activities that will help the students to develop a more accurate vision.

The students' interests must also be considered when teaching the program content. If this aspect of learning is neglected when building teaching sequences, learning may be less meaningful and classroom management problems may arise. If their interests are taken into account, students will be more committed to the learning goals and will find the acquisition of meaningful knowledge more enjoyable. Before those interests can be considered, however, they must first be identified, and there are several different ways of doing this, including consulting the students themselves and other teachers, and reading reference documents on trends within the student population generally and the target age group in particular (COFPE 1998: 17).

- Establishes connections between the trade being taught and workplace health and safety issues when developing teaching/learning situations.

In addition to mastering subject-specific knowledge, teachers must be able to establish connections between the trade being taught and some aspects of its practice, including workplace health and safety. Every official program of study has an operational objective covering the application of health and safety rules, but the teaching/learning situation design phase offers an excellent opportunity to give additional weight to health and safety issues. For example, a review of notional contents and workplaces in the teaching/learning situation will raise student awareness of the real-life problems faced by practitioners of the trade. This makes it easier for them to understand the dangers and risks to workplace health and safety, as well as the possible consequences, potential solutions and available means of prevention and protection (Hirigoyen 1998: 19).

- Anticipates obstacles to learning in the teaching of program content.

As we saw earlier, this involves exploring the elements likely to hinder the learning of the content elements required to develop competencies. As a notion, it is tied in with student conceptions. When an obstacle is identified, it can be converted into a problem situation or enigma and then built into the learning situation, to promote meaningful learning of the unit content. Obstacles can be identified in a number of ways—for example, by analyzing past experiences of teaching similar content to the target group, and by carefully considering similar content that has already been taught to the target group. Once an obstacle has been identified, teachers must plan activities that will encourage the students to compare and evaluate their knowledge at different stages of the learning process.

- Plans teaching/learning situations that provide opportunities to consolidate knowledge.

Some types of knowledge, especially in vocational education, have a greater need for consolidation before they can be transferred. This is the case for procedural and psychomotor skills—for example, assembling and dismantling technical objects and performing certain repetitive movements as part of a task. Consolidation can be achieved through "practice" activities built into the teaching/learning situations.

☛ Plans learning situations that provide opportunities to apply competencies in different contexts.

This feature refers to two major aspects of teaching/learning sequences, namely the application and transfer of competencies.

Application involves observation of previously acquired competencies and new competencies in learning activities. As an ongoing process, it allows previously acquired competencies to be consolidated and enables teachers to ensure that their students are gradually achieving the aims of the program of study.

Transfer is defined as the presentation of learning activities in different contexts that gradually come to resemble the workplace or, even better, in a real-life context, for example as part of workplace training periods.

☛ Considers social differences when preparing teaching/learning situations.

This feature refers to the need, when preparing teaching/learning situations, to consider the students' gender and their ethnic, socioeconomic and cultural background. Teachers should aim to place students in situations that will teach them to treat every individual equally when learning and practising a trade, regardless of gender, age, socioeconomic and cultural condition, and so on. This element is particularly important in the vocational sector, where student bodies tend to be composed of people of different ages, from different socioeconomic or family backgrounds and cultures, and with different levels of education, etc.

LEVEL OF MASTERY REQUIRED DURING AND AT THE END OF INITIAL TRAINING

During and at the end of his or her initial training, the student teacher should be able to:
✔ *master the program(s) of study for the specialty subject(s) or trade(s) being taught*
✔ *master the program(s) of study for the specialty subject(s) or trade(s) being taught*
✔ *design teaching/learning activities that will promote the development of the target competencies in the program(s) of study and that take into account workplace health and safety regulations and the constraints and requirements of the environment*

COMPETENCY 4

COMPETENCY STATEMENT
To pilot teaching/learning situations that are appropriate to the students concerned and to the subject content with a view to developing the competencies targeted in the programs of study.

MEANING

In its broader sense, the term "pilot" has a similar meaning to the verb "guide" (Webster 2000). In a strictly pedagogical sense, and from the standpoint that the student is the core element in the learning process, it refers to the ability to establish and maintain a given direction, take calculated risks in the midst of uncertainties and constraints, and map out the students' learning path. It also refers to the teacher's task of giving direction, opening doors, arranging obstacles and reorienting or sometimes structuring the steps and detours taken by the students. This competency is certainly not limited to controlling or managing time or resources, but includes the judgment that directs the teacher's attention towards indicators of an imbalance in the students' conceptions—indicators that tell them they should be triggering and organizing learning processes to create new balances.

The mission of vocational education is to train competent specialists in a range of trades that require general and cross-curricular competencies common to all trades, as well as their own specific competencies. As part of that mission, teachers are required to place the students in situations that encourage learning.

Responsibility for successful development of competencies therefore lies with both the students and the teacher. The teacher's role is to guide the students through a variety of learning activities and provide the resources they need for those activities. The students are responsible for carrying out the activities by implementing strategies based on the resources that are available and appropriate to the development of the target competencies.

For the teacher, "guiding" means supporting student learning. This involves helping the students to engage in learning situations in which they can develop the target competencies. In other words, the teacher must use a variety of methods to motivate the students to learn and progress towards the objectives and aims of the programs of study. It is also up to the teacher to make the learning situations and resources meaningful and conducive to the development of competency in the students' chosen trade, and to give the students opportunities to prepare and implement learning strategies aimed at developing the target competencies, using the resources available.

Lastly, the teacher must provide a level of supervision that is tailored to the students' learning pace and sufficiently constant to allow for the consolidation, application and transfer of the newly acquired competencies.

FEATURES

☛ Involves the students in meaningful situations designed to help them develop competencies.

Student involvement in teaching/learning situations depends on how motivated they are to learn. Motivation is an individual construct that can be influenced considerably by the students' social environment, usually composed of their peers, parents and teachers. Of these three groups, it is the teachers who have perhaps the greatest impact on student motivation at school. They are the ones who have information on the learning context, and they are often considered by their students to be experts with authoritative knowledge of the trade or specialty being taught. Thus, although teachers do not control all the variables relevant to motivation, they are nevertheless important players in the educational motivation process (Archambault and Chouinard 1996).

For the teacher, involving the students in meaningful situations designed to help them develop competencies means proposing situations that take the students' characteristics into account and offer challenges tailored to their expectations and abilities (COFPE 1998). It also involves presenting learning situations with aims and procedures that are similar to the tasks and operations performed in the workplace. The teacher must therefore be able to select and adopt the teaching methods and strategies most conducive to the achievement of the program objectives. At the same time, he or she must inform the students of the place and importance of the training tools, i.e. the units and learning activities in the training plan, and provide information on the conditions in which the learning activities will take place.

☛ Provides students with the resources they need to complete the learning activities.

The students' ability to complete the learning activities depends to a large extent on having access to appropriate resources at the appropriate time. There are two principal categories of resources, namely human and physical.

Human resources are the people who are or could be available to play a given role in a learning situation. In addition to the teacher, they could include other teachers of the same subject matter or specialty, qualified professionals, technicians, stock-keepers, speakers, business representatives and so on. However, the teacher should always be the principal resource used by the students in their learning activities, the person to whom they normally turn for information on what to do and how to do it.

As well as being a guide, the teacher should ensure the availability of other human resources who may be useful to the students in learning situations. This involves inviting the people concerned to make a contribution to the learning activity, making sure they are available at the right time, and most importantly, explaining their role to the students.

The physical resources required for learning activities include the premises (classroom, laboratory, workshop and training site) and the teaching materials.

As far as the premises (classroom, laboratory, workshop or training site) are concerned, the teacher must ensure that they are consistent with the aims of the activity and large enough to hold all the students in the group. The premises must also meet health and safety standards, and it is the teacher's responsibility to ensure that this is the case.

With regard to the teaching materials (reference documents, equipment, apparatus, tools and materials), the teacher must first decide what is required and then make sure it is available to the students in sufficient quantities and in proper working order.

- Guides students in understanding elements of learning situations, in selecting, interpreting and understanding the information provided in the various resources, in selecting and using equipment, accessories, tools and materials safely, and in carrying out learning activities.

One of the teacher's responsibilities is to guide students as they complete their learning activities. To become a guide, a teacher must first accept that his or her teaching forms part of an approach focused on learning, and should thus emphasize the act of learning. Teaching based on the transmission of knowledge is just one of many possible teaching methods, to be used occasionally, as opposed to regularly, when required by the context, to help the students with their learning.

Within this paradigm, the act of guiding involves proposing activities that offer students a reasonable, relevant challenge that they are willing to accept. A "reasonable challenge" is defined as an obstacle that destabilizes the students' cognitive perceptions, but one they can feel confident of overcoming if they acquire new knowledge following on from their existing knowledge. A "relevant challenge" is one that is comparable to a real-life situation in the workplace. Challenges can take a number of different forms, including problem situations, case studies, design and layout projects, and so on. They should be selected in accordance with the program's aims.

Guiding students also means helping and supporting them as they strive to understand the basic elements of their learning activities (i.e. the objectives, contexts and methods). The teacher, in his or her role as a mediator, informs the students of the objectives and helps them, through appropriate questions, to grasp the meaning and scope of the activity. The same applies to the learning context, which can be a problem situation, a troubleshooting situation, a case study, a project to design or build a technical item, an industrial training period and so on.

The same also applies to the context, i.e. the conditions in which the activities take place. The teacher must tell the students about the conditions in the training environment, explaining the various learning strategies that could be applied and helping the students to understand the meaning and scope of those strategies. It is also useful to provide information about the human and physical resources and their respective roles and functions during the activities, the applicable health and safety rules, the duration of the activity and the type of evaluation to be carried out.

Guiding students in learning situations also means helping them select, interpret and understand the information provided by different resources. Teachers, in their role as mediators, content specialists and experts in the teaching/learning process, must check

the learning strategies applied by the students in the activities, through regular observation or questioning. Where necessary, it is also the teacher's job to encourage the students to think about their strategies and make sure they are relevant to the target objectives. The strategies may include the selection, interpretation and understanding of data from various resources, safe use of equipment, tools and materials, and carrying out technical tasks in accordance with generally accepted rules.

☛ Supports student learning by asking questions and providing frequent and relevant feedback to promote the consolidation, integration and transfer of learning.

We have already discussed the importance of providing quality support for student learning. Support for learning means regular checks of student activities, either by asking appropriate questions that encourage the students to consider the validity of past, present and future actions, or by providing frequent, brief and coherent feedback to confirm or destabilize their decisions (see Competency 5). Students need this type of feedback from their teacher, whom they consider to be an expert in learning process and content. They need the teacher to tell them when their learning process is or is not appropriate for the target objectives, and where necessary give them additional instructions.

Supporting student learning also means identifying learning problems and taking appropriate remedial action. The teacher can identify problems by questioning students about their reasoning and actions, and can then propose tangible, appropriate corrective measures.

Learning support should not only help students to master competencies, but it should also foster the consolidation, integration and transfer of learning. It is not enough simply to introduce students to a given competency by proposing a learning activity. Instead, the teacher should guide the students through a range of activities by providing the necessary information, explanations, demonstrations and other elements as required or upon request. Activities will differ in terms of difficulty and methods for each competency or set of competencies, and the contexts in which they take place will gradually come to resemble real-life work situations. In the best-case scenario, they will actually take place in an industrial setting.

☛ Encourages teamwork

The conditions in which learning activities take place in a vocational education centre should resemble, and preferably be identical to, the conditions in which the trade is practised in the workplace. As far as possible, learning activities should be directed towards the achievement of one of the program goals, that of "integrating the person into professional life" (Ministère de l'Éducation 1994: 2.9; our translation). One important condition is the need for cooperation and teamwork that now form an integral part of all trades and professions. With the integration of work processes, every operation now has repercussions for other activities in other departments, calling for a collective approach to problem solving (Conseil supérieur de l'Éducation 1994: 17).

The meaning of teamwork is also derived from approaches focused on learning. The teacher must introduce students to different conceptions of learning so that they can compare their knowledge, skills and abilities. The process of comparison generates more meaningful learning for everyone concerned.

LEVEL OF MASTERY REQUIRED DURING AND AT THE END OF INITIAL TRAINING

During and at the end of his or her initial training, the student teacher should be able to:
✔ *guide students, through appropriate interventions, in carrying out learning activities as part of the program's competency acquisition process, taking into account the specific features of the environment*
✔ *detect teaching/learning problems that arise in the application of the competency acquisition process and use the appropriate resources to remedy them*

COMPETENCY 5

COMPETENCY STATEMENT
To evaluate student progress in learning the subject content and mastering the related competencies.

MEANING

In a program of study focused on competency development and based on an approach focused on learning, learning evaluation is characterized by its objectives, by its relationship with the learning process, by the means used to interpret the results of summative evaluations, by the methods used and by the underlying values. These characteristics serve as a basis for the definition and functions of learning evaluation proposed in the Evaluation Policy (Ministère de l'Éducation 2000a), and also for preparing the meaning of the related teaching competency.

A program's training targets are competencies. "In vocational education, a competency is the power to act, to succeed and to progress, which allows a student to satisfactorily perform tasks or activities based on an organized set of different types of knowledge (understanding, skills in various fields, perceptions, attitudes, operational frameworks, etc.)" (Ministère de l'Éducation 2000a: 31; our translation). Competencies are therefore complex abilities involving the integration and transfer of learning acquired in a range of situations both inside and outside the classroom. Although the competencies are the objects of the evaluation, they are not directly observable. Acquisition of a competency must be inferred from the student's performance in a number of tasks requiring the exercise of certain aspects of the competency. The student's performance provides information that allows the teacher to construct and support a judgment on the student's progress in developing the competency. The performance becomes an indicator that fuels the teacher's judgment of the student's level of mastery of the competency. The relationship of inference between performance and competency constitutes a dual challenge for the teaching team, which must construct evaluation tasks and situations that require the use of the competency's various dimensions and also generate performances that express those dimensions adequately.

Evaluation is now a part of the learning process, and takes place on a daily basis in the many interactions between students and teachers, students and other students, and students and situations. The learning support function overrides the certification function, which is reserved for key times at the end of a set of processes (D'Amour 1996; Aylwin 1995). It involves the students actively, and must be carried out in such a way that the students gradually become independent, able to take charge (with support from the teacher and other students) of the processes that allow them to judge their own performances (Ministère de l'Éducation 2000a).

Summative evaluations are interpreted on the basis of criteria that set out anticipated performance features. Student performances are compared not with those of other students, but with the types of results that are anticipated, known, proven over and over again, and illustrated during the learning process. The teaching or program team devises the evaluation situations and contexts, and describes the aspects of the students' performance, along with the criteria, that will be the focus of the summative evaluation.

The task of evaluating the level of mastery of a competency also involves methods and instruments that reduce the importance of measurement during learning and enhance the importance of observation and judgment on the part of the teacher. Students are placed in situations designed to activate the resources required to implement a competency, while the teacher observes their actions and work, and identifies and retains indicators so as to give feedback, trigger adaptations and support the students' motivation and efforts. If they are to observe students in learning situations, teachers need tools that allow them to describe the features of the students' performances.

Lastly, in exercising all these dimensions, the evaluation competency has a strong ethical component. Teachers must constantly exercise their judgment, and decide between what is legitimate and what is not with regard to both their expectations and the indicators they intend to use as manifestations of the dimensions of a competency (Hadji 1997). They must be aware of their own representations of the competencies they wish the students to develop, and must be able to assess the sources of differences between their own representations and those of the students or their community of origin. Rather than confirming the teacher in a position "superior" to the student being evaluated (Hadji 1997), such differences provide an opportunity for teachers to think about the value of the progress they want the students to make, and the ways in which to achieve it. In measuring the students' capacities, teachers must associate those capacities with their own reflections, negotiating the meaning of the criteria used and illustrating their importance in social or classroom practices of significance to the students.

FEATURES

- Gathers data as students are engaged in a learning situation in order to identify their strengths and weaknesses and to review and adapt his or her teaching accordingly to help them progress.

Once the students are engaged in a learning situation, teachers observe them and question them in order to see what they are doing, correct any misunderstandings regarding the instructions and ensure that they have correctly selected or interpreted the data they need to carry out the tasks. The students' attention must be directed towards the relevant aspects of the situations or performance, so that they can regulate their actions and plan or revise their steps. Teachers must provide feedback on the cognitive (accuracy of information and cognitive strategies, appropriateness of the metacognitive strategies), emotional (quality of effort, ability to succeed, relationship with learning or school) and social (openness, cooperation, participation) aspects of the performance required by the task or situation at hand. Depending on the students' progress, teachers then adapt the components of the situation, or review and extend unconsolidated learning that is necessary for the task. They must obtain or ensure that the students have access to self-monitoring learning methods (checklists, correction grids, exercise keys, mutual

correction, examples, diagrams, interactive tutorials, etc.) so that they have as much control as possible over their activities (Louis 1999;[3] Tardif 1998; Pôle de l'Est 1996). Lastly, teachers must document their information sources (diary or logbook, student production files, paper or electronic portfolios, observation grids, checklists, etc.) so that they are able to monitor the students' progress in their learning and projects, and be able to base their judgments on the extent to which the competencies have been mastered.

Anticipated performances are placed on a scale ranging from unacceptable to solid, stable mastery of the competency. Teachers involve the students in the competency evaluation process, for example by asking them to select the work that best illustrates the progress made during the cycle, and to make comments using pre-established performance criteria and thresholds. They then judge the student's ability to identify his or her progress, support an interpretation with elements from his or her file, and undertake the next steps in the competency development process.

- Takes stock of the learning acquired by students in order to assess their mastery of the related competencies.

This feature, an extension of the previous one, is concerned with summative evaluation of learning, which takes place when a training unit is examined in its entirety. It refers to knowledge acquisition, working processes and the resulting products. Criterion-based evaluation of learning requires a number of instruments, some that already exist and some that must be developed by the teacher. The instruments in question are composed of evaluation objects taken from program specification tables or analysis and planning tables. Some programs have their own evaluation sheets, and in these cases the teacher does not have to prepare new ones, but simply needs to interpret the existing sheets correctly. In other cases, the teacher has access to proposed test descriptions that can be used as a basis for new summative evaluation tests.

For the vocational teacher, reviewing learning means making a final, so-called "dichotomous" summative evaluation of every element in the attendance evaluation grid or the evaluation sheets. This involves deciding on the appropriate value to be given for a written answer, a technical production, the appearance of a product during or at the end of the production process, and product quantity, using a scale ranging from "pass" to "fail." The teacher's ability to do this will depend on his or her level of experience and capacity to interpret the elements contained in the grid statements and evaluation sheets, and to identify appropriate tangible expressions of those elements when evaluating work processes and products (in the case of operational behavioural objectives), or participation (in the case of operational situational objectives).

- Designs or uses tools to evaluate student progress and mastery of competencies.

Teachers begin by designing new tools or using existing tools to measure competency acquisition according to specific criteria. They must then make a judgment on the basis of a pre-established pass threshold. In vocational education, only observable elements are

3. Louis (1999: 115-116) states that self-monitoring methods must stimulate the student's thinking on and assessment of his or her learning and the processes implemented during that learning . . . it is not the same as self-assessment or self-marking, which consists in assigning a grade or letter, contrary to the meaning of self-monitoring.

measured. Teachers design evaluation tools to measure student progress and mastery of competencies based on their own interpretation of the program specification tables, which are composed of evaluation objects that should, in most cases, be included in the evaluation tools or sheets. The data observed using the tools (questionnaires, evaluation sheets, observation sheets, grids, direct measurements, etc.) then serve to draw up a review of learning that serves as a basis for the teacher's evaluation of how well the student has mastered the competencies.

When evaluating competency acquisition in cooperation with the teaching team, teachers must use methods that allow them to measure the complexity of the student's performance and ensure that learning has been integrated and transferred. Such methods include case studies, plan preparation, situational reconstructions, simulations, role-playing and so on, and student performance is measured using a range of instruments (tests, observation or assessment grids, various productions, commented self-evaluation, etc.) relating to the different aspects of the competency expressed in different contexts.

Teachers support student progress by means of different observation or assessment grids and checklists, the complexity of which varies according to the stage of the learning process and the learning objectives (cognitive, emotional and social). They identify observable elements with which they associate descriptive, graphic or numerical scales on which they can record their observations (Louis 1999). They inform the students of the content of these grids or lists, showing them how to use them to guide their learning, offer feedback to classmates, or examine their work. The elements and scales in the grids can be changed, depending on the students' reactions, any comprehension or application difficulties encountered, and the contexts in which the tools are applied. The grids should be composed of simple but complete statements to situate the students' performance levels. In some cases it is possible for the teacher to use methods that emphasize the handling and memorizing of information or processes, for example in early work on a subject matter that requires familiarity with specific terms as a prerequisite for more complex activities.

- Communicates expected outcomes to students and the other people concerned, and provides feedback on student progress and mastery of competencies using clear, simple language.

The descriptions of the second and third features have shown that the teacher's communication of the learning objectives, pass thresholds and the performance or participation evaluation criteria used to determine whether or not the students have mastered the competencies forms part of an integrated learning evaluation process. Teachers provide their students with numerous opportunities to use self-evaluation methods and express their understanding of the expected outcomes.

Teachers must also explain learning progress and competency development to the students and to the other people involved, including other teachers of the same subject matter or discipline who also teach the same students. Their explanation is based on performance or participation criteria. They must also be able to situate the place of the competencies in the program of study, for the benefit of both the students and the other people concerned.

Lastly, teachers must give the people concerned a qualified assessment of the student's progress in acquiring the competencies, emphasizing aspects of the competency that the student has mastered well and those that require further effort. They describe any difficulties encountered by the student by referring to performances observed in different contexts, propose methods by which the people concerned can help the student, and also invite them to propose their own methods.

☛ Works with the teaching team to determine the stage of progression within the program of study.

In teaching directed towards competency development, progress is established when the teaching team prepares its long-term plan of program components (see the first feature of Competency 3).

LEVEL OF MASTERY REQUIRED DURING AND AT THE END OF INITIAL TRAINING

During and at the end of his or her initial training, the student teacher should be able to:
✔ *detect the strengths and weaknesses of the students in a learning situation*
✔ *in cooperation with the students, undertake a process of reflection on their actions, so that they are able to evaluate their own progress towards mastering the target competencies of the program of study, and where applicable, identify and apply methods that will enable them to continue to progress*
✔ *carry out summative evaluation of the competencies to be mastered by the students*
✔ *collaborate with colleagues in designing communication tools to inform students, those responsible for them and other interested persons of the development of the competencies targeted by the training program or programs*

COMPETENCY 6

COMPETENCY STATEMENT
To plan, organize and supervise a class in such a way as to promote students' learning and social development.

MEANING

Planning, organizing and supervising a class, often referred to by the somewhat limited expression "class management," involves a set of separate professional activities that, together, make up the practice of teaching. While many interactive professions are based on one-on-one relationships, teachers must form a relationship with a group of students, whom they lead towards mastery and development of the competencies prescribed in the programs of study, while ensuring that they understand and respect social standards. The collective and public nature of daily classroom life places a heavy burden of professional responsibility on teachers. Those who are unable to manage a class well can significantly compromise the intellectual and social development of their students. Many studies of teaching effectiveness also suggest that ordered, harmonious classroom operations focused on learning have become the variable with the greatest individual impact on student learning (Gauthier et al. 1997: 177). Thus, the ability to implement and maintain an effective, harmonious group operation in the classroom, laboratory or workshop, based on the competencies to be acquired, is a vital competency in vocational education.

The planning, organizing and monitoring of a class affects many aspects of the group's life, including the structuring of the physical environment, how teaching materials are used, compliance with health, safety and hygiene rules when carrying out work in the laboratory or workshop, how equipment, tools and materials are used, the rules and methods applicable when carrying out work in the classroom, laboratory or workshop, student movements, transitions between activities, the methods used to supervise learning activities in the classroom, laboratory, workshop or workplace (e.g. during workplace training periods), and disciplinary measures. The range of possible learning activities thus means that teachers must anticipate, implement and monitor the specific organizational methods and interactions required in each case.

Needless to say, it takes many years to build this competency, which teachers say is adjusted regularly as they come into contact with new situations and more difficult groups of students (Huberman 1989). It is of particular importance for vocational education, due to the widespread application of approaches focused on learning—for example, projects or situations in which specific problems must be solved, and the use of different forms of technology.

Teachers will probably be expected to organize and supervise several subsets of students engaged at the same time in different learning tasks with varying requirements, paths and endpoints, sometimes alone, sometimes working with colleagues. This is usually the case in the laboratory or workshop, for example.

FEATURES

☛ Develops and implements an efficient system for running regular classroom activities.

This component involves a systematic approach to regular activities and interactions in the classroom, laboratory or workshop. In the classroom, teachers deal mainly with oral contributions from students, requests for assistance, settling down to work, administration of tests, the use of learning materials, the return of written work, movements during and after activities, and so on. In the laboratory or workshop, they need a more general system to manage interactions with other groups and other teachers, apply safety and hygiene rules, organize movements inside and outside the laboratory or workshop, and obtain the tools, equipment, materials and other items required for the task at hand.

Special systems are also required for exercises and tests relating to competencies. They include the procedure by which students can obtain help from the teacher or other teachers, or from other students in their own group or another group. Such systems should be based on those established by the teaching team for the subject area or specialty.

Efficient classroom operations require careful planning and implementation from the very beginning. This allows teachers to anticipate and prevent operational problems that may generate inattentive behaviours among the students. It is a question of introducing the students, from the beginning, to rules and procedures so that they can work safely, and so that time, materials and energy are not wasted, equipment is not broken, tasks are completed appropriately and all class members show respect for other people in the classroom, laboratory or workshop. This involves explanations, repetitions, practice sessions, modelling and discussion of the consequences of different student behaviours (Doyle 1986; Evertson 1989). Teachers who implement their own "systems" must first establish the principles with the other teachers involved in the program. From time to time, especially in the early weeks, they must also adapt their planning to the groups for which they are responsible, and take into account any physical changes in the laboratory or workshop, such as the addition of other groups, new equipment or new accessories.

☛ Communicates clear requirements regarding appropriate school and social behaviour in the classroom, laboratory or workshop, and makes sure that students meet those requirements.

The success and behaviour of students are influenced by the messages they receive concerning what is expected of them (Gauthier et al. 1997:185). Such messages are communicated explicitly and implicitly, in words but also through the teacher's non-verbal behaviour. Clear communication of requirements and expectations is therefore not limited to the statements and explanations given to the students. It also involves

consistency between what is done and what is said, i.e. an ability to perceive contradictory messages given to students by the teacher or by his or her colleagues, identify the sources of the contradiction, deliberately select the values to be conveyed and realign words and actions accordingly. Other steps are also required to ensure that the students understand and meet expectations, including reformulating those expectations, breaking them down into steps if necessary, encouraging appropriate manifestations, demonstrating the positive consequences of such manifestations, encouraging the students to think about what they have done, especially where their actions have or may have had negative or dangerous consequences for their own health and safety or that of other people, and reprimanding any repetitions of inappropriate behaviours.

- Involves students on an individual or a group basis in setting standards for the smooth running of the class.

Generally, the members of a learning community are more likely to comply with rules that they themselves set than with rules that are imposed upon them. The same applies to vocational students. It is therefore important for the teacher to involve the students in the preparation and application of the rules that will govern the group's interactions.

To do this, the teacher will have to reach a consensus or agreement with the students concerning acceptable working conditions and situations, and work with the students to adapt those conditions and situations, solve conflicts together, share tasks and responsibilities and decide on any retribution if a member of the class fails to comply. This component is complementary to the planning and implementation of efficient classroom operations, in that it involves students in the process, thus allowing them to observe aspects of group life that would be inaccessible if the teacher were to take a less open approach.

- Develops strategies for dealing effectively with inappropriate behaviour when it occurs.

Given the diversity of students in the vocational stream (COFPE 1998: 8), teachers are much more likely to have students (of all ages) in their class who do not fit the training centre's cultural standards. Some students may think there are no behavioural restrictions, because the organizational structure is very different from the general stream or from other educational or working environments in which they may previously have studied or been employed. They may, for example, imagine that they are free to use tools before learning the theory, simply because of their age and experience and the focus on personal responsibility.

Research suggests that teachers must demonstrate a desire and an ability to act when the rules are broken (Gauthier et al. 1997: 182). This requires an ability to recognize inappropriate behaviour quickly and to interrupt it as discreetly as possible before it disrupts or interrupts classroom activities, possibly endangering the safety of the group. If the behaviour persists, teachers must analyze the situation and decide what to do. For example, they may meet individually with the students concerned and ask them to think about their actions or apply specific measures to them, discuss the situation with the class as a whole, or review their classroom, laboratory or workshop management system so as to prevent recurrent disturbances.

☛ Maintains a classroom climate that is conducive to learning.

A climate that is conducive to learning derives from a set of activity control actions in the classroom, laboratory or workshop aimed at maximizing the students' investment in their learning. Teachers must use their observation, analysis and evaluation skills at the same time, to ensure that their rules and task planning for a given unit are consistent and take immediate corrective action if necessary. The speed with which teachers are able to detect and react to events, and their ability to manage several events and operations at once, help maintain alertness within the group and ensure that objectives can be achieved.

It is sometimes difficult for teachers to do this, especially in the laboratory or workshop, where inherent constraints such as the group being spread over a large area and the number of groups using the room at the same time, can complicate their task. Teachers can adopt a variety of strategies to manage their group more effectively in the laboratory or workshop and thus maintain a climate favourable to learning. For example, they may decide to share student supervision tasks with other teachers. This type of approach, along with other aspects of active supervision, including evaluation and correction of the speed, pace, fluidity and duration of events (Gauthier et al. 1997: 196), will help ensure that the class remains engaged in learning tasks aimed at achieving the objectives set.

LEVEL OF MASTERY REQUIRED DURING AND AT THE END OF INITIAL TRAINING

During and at the end of his or her initial training, the student teacher should be able to:
✔ *apply systems, either individually or with other members of the teaching team for the subject or trade, to ensure that the group's regular activities in the workshop, laboratory or classroom are both effective and safe*
✔ *identify and solve organizational problems that hinder the group's regular activities in the workshop, laboratory or classroom, either individually or with other members of the teaching team for the subject or trade*
✔ *anticipate some of the organizational problems that hinder the smooth running of the class and apply measures to prevent them*
✔ *work with the students to help them think about their actions so that they become aware of the impacts of those actions on their own training and that of other students in the class, and where applicable, implement solutions that will improve matters*
✔ *help students who behave inappropriately to solve their problems and, where necessary, make and enforce decisions that will improve the situation of those students and of the class(es) affected by their behaviour*

COMPETENCY 7

COMPETENCY STATEMENT
To adapt his or her teaching to the needs and characteristics of students with learning disabilities, social maladjustments or handicaps.

MEANING

The school adaptation policy adopted following the Estates General is harmonized with this reform and proposes several paths of concern to all teaching staff, whether they work with students with learning disabilities, social maladjustments or handicaps in regular classes, or with special classes in regular or special schools. Some elements of the policy are also relevant to vocational education.

The first path highlights the importance of preventing failure and dropping out, and of acting quickly when difficulties come to light. All teachers must develop and exercise competencies with a view to identifying students at risk and acting quickly to deal with difficulties that could, if they persisted or became worse, compromise the students' educational progress.

The second path defines the adaptation of educational services as the primary concern of everyone working with students with learning disabilities, social maladjustments or handicaps (Ministère de l'Éducation 1999: 20). Teachers must gather, use and incorporate specific information on the needs of students in difficulty so as to adapt the program, the teaching methods and the teaching materials to the students' different paths. Teachers must also coordinate their actions with those of other players providing adapted services for students, both inside and outside the school.

The third path requires all players to create a veritable educational community with a student in difficulty, and to act in partnership with the organizations[4] working with that student, whatever his or her age. The challenge here is to develop accountability in students whose development may have compromised their ability to cooperate with and trust adults, and to believe in their own chances of success. To achieve this, teachers help establish indicators of success that are significant to the student, encourage the student to commit to the learning process, and generate concerted action on the part of everyone involved.

The school adaptation policy encourages all school partners to establish avenues of action for students at risk, especially those with adjustment difficulties, whose numbers have grown in recent years as a result of economic and social problems, including unemployment and poverty. The teaching staff help implement collective measures so as to understand the situation of the students, meet their needs and guarantee their perseverance and the quality of life at the training centre.

4. It should also be remembered that, for vocational education, other organizations such as the Conseil de la santé et de la sécurité au travail may be consulted in connection with the services.

FEATURES

- Facilitates the educational and social integration of students with learning disabilities, social maladjustments or handicaps.

The teaching team identifies the needs and abilities of the students in difficulty under its authority, and works together to organize teaching and monitoring methods. The team members agree on the program adaptations and evaluation strategies required for these students. Teachers must ensure that students in difficulty have access to assistance and tools (tutoring, individual assistance, technical support, adapted equipment) and know how to use them. If necessary, they negotiate an individual contract with a student, to enable that student to catch up, consolidate learning or set objectives suited to his or her progress. Depending on their roles and support tasks, teachers pool their observations of the behaviour and progress of these students and adapt their teaching accordingly.

- Consults resource people to obtain background information on students with difficulties (needs, progress, etc.).

Teachers obtain information on the educational paths of their students in difficulty, the measures already taken and the educational and specialized services provided. Where appropriate, they consider the steps taken and efforts made by different players, and if necessary, attempt to obtain information that will lead to a better understanding of the student's needs and capacities and the conditions conducive to his or her success and integration. They seek to identify precisely where the educational, developmental, intellectual, social or emotional delay is situated, so that they can target their teaching. They work with the other members of the teaching team to establish and plan proficiency activities that help them learn more about the needs of students in difficulty, and to develop appropriate teaching methods.

- Proposes learning tasks, challenges and roles within the class that help students to progress.

Although the fact that they are responsible for students in difficulty may require teachers to work individually with certain students in order to provide specific forms of support, generally speaking such students learn accountability on an everyday basis in interactive contexts where they must work together to perform tasks. Students in difficulty must also be placed in conditions that allow them to develop the competencies prescribed in the program. Often, teachers must also show students the advantages of using effective strategies, and the disadvantages of inappropriate strategies. Where possible, teachers use interactive tutorials containing learning loops that consolidate prior notions, break tasks down into steps, illustrate different ways of proceeding with the task and provide frequent feedback on the actions taken. For teamwork, teachers ensure that students in difficulty are given tasks and roles to play, and that their contributions are sought after and acknowledged. If necessary, they remind the class of the communication rules it adopted to ensure a healthy and productive working climate, and take immediate action if a member of the team breaks those rules.

- Participates in developing and implementing individualized education plans.

The school adaptation policy requires vocational education centres to develop individualized education plans for all students with learning disabilities, social maladjustments or handicaps (s. 110.11 of the *Education Act*). Although teaching in the vocational stream is very different from teaching in the general stream, it is equally important for some students to have an individualized education plan that addresses their own specific needs. The plan is drawn up jointly by everyone working with the student, in the student's presence. It is then used to assess the student's situation and provide for appropriate corrective measures, and is itself reassessed on a regular basis.

LEVEL OF MASTERY REQUIRED DURING AND AT THE END OF INITIAL TRAINING

During and at the end of his or her initial training, the student teacher should be able to:
✔ *exchange ideas with other teachers in order to draw up an appropriate teaching plan*
✔ *adapt his or her teaching to the specific difficulties of individual students*

COMPETENCY 8

COMPETENCY STATEMENT
To integrate information and communications technologies (ICT) in the preparation and delivery of teaching/learning activities and for instructional management and professional development purposes.

MEANING

In the last twenty years, new computer applications in the production sector have meant that information and electronic information processing have become of key importance in society. As a result, "working increasingly means manipulating symbols that activate physico-chemical mechanisms or give access to other symbols that, once processed, become relevant information" (Saint-Pierre and Rousseau 1993 in Conseil supérieur de l'éducation 1994: 15; our translation).

The technological revolution in the production of both goods and services has led to greater demand for training in technology-related fields, and the vocational education sector has felt the impacts of this. Indeed, it has had to adapt its technology programs to the new needs of businesses, acquire appropriate apparatus and tools, and train teachers to use them.

In addition to modifying its programs of study, the educational system subsequently had to meet the challenge of implementing new information and communications technologies (ICT) as teaching and learning tools in vocational education centres. Teachers therefore had to be trained not only in the technology, but also in new teaching methods, an aspect that, according to the Conseil supérieur de l'éducation (1994: 37), was completely neglected, especially in the vocational and technical streams.

Yet, again according to the Conseil supérieur de l'éducation (1994: 38), "the introduction of ICT generated new teaching situations for which teachers need to be equipped" (our translation). This means that the competencies required by teachers are connected more with the integration of ICT into teaching situations than with actual mastery of the technicalities of computers. For example, teachers need to be familiar with the issues raised by the technologies (Conseil supérieur de l'éducation 1994: 37) and to be able to judge the value of an educational software package in terms of training objectives and student characteristics, rather than actually being able to write software applications. Knowledge of common software packages (word processing, databases, spreadsheets), E-mail and information networks should allow teachers to be more effective in many aspects of their instructional management strategies. Lastly, access through search engines to information banks multiplies the sources of, opportunities for and methods of professional development. Opportunities for continuing education no longer depend on physical proximity or the presence of an educational institution in the neighbourhood (Ministère de l'Éducation 2000: 99).

FEATURES

- Anticipates the issues and judges the potential and limitations of information and communications technologies.

For the teacher, anticipating issues means predicting the outcome of ICT applications in schools. Outcomes can be predicted if the teacher understands the place occupied by the technologies at the pedagogical, didactic, social and cultural levels.

Teachers must therefore be able to answer a number of questions. Among other things, they need to ask themselves what impact ICT use will have on the development of the competencies prescribed in the programs of study, and the subsequent application of those competencies in the workplace. More specifically, they need to decide whether the use of ICT will align the training offered by the centre more closely with the workplace, where the very conception of work has changed, mostly because of the introduction of new technologies.

We know that information, supported by a range of sophisticated technological platforms, has become the cornerstone of production and consumption activities. The shift from the industrial society to the information society has obviously had an impact on the labour market. The nature of work itself has changed, so that "the reflexive aspect of work has become the object of rationalization" (Saint-Pierre and Rousseau 1993 in Conseil supérieur de l'éducation 1993: 16; our translation).

Teachers must also consider the students' ability to use ICT and to achieve the operational objectives of the program within the time allowed. They must consider what will happen to group management if the apparatus and tools are not available in sufficient quantities, or if students have access to vast amounts of highly disparate information, for example via the Internet.

Lastly, they must consider the impact of information exchange networks on schoolwork if some but not all members of the group have access to a computer at home. In other words, they need to examine the resulting "risk of social atomization" (Fréchet 1992 in Conseil supérieur de l'éducation 1994: 20; our translation). More and more homes are equipped with ICT, with the result that the boundaries between the student's educational and living environments have, to some extent, been abolished. It is important for teachers to be aware that it is mainly the younger, better educated and better paid members of society who have access to computers at home, and that this poses a risk of exclusion for those whose financial or cultural resources do not extend to such a purchase (Bélanger and Labranche, in Conseil supérieur de l'éducation 1989).

Teachers also need to examine the potential and limitations of ICT—in other words, they need to determine its approximate value or utility in developing the competencies required by the program of study. This means being able to judge how relevant the software content is to the program content, estimating the software's contribution to the construction of student knowledge and selecting the information systems that best correspond to the learning styles and learning pace of the students.

In short, teachers should be able to forecast the positive and negative impacts of technology applications on the development of student competencies within a program of study.

- Assesses the instructional potential of computer applications and networking technology in relation to the development of the competencies targeted in the programs of study.

A number of sites currently offer educational resources prepared by teachers, vocational education centre teaching teams or other nonprofit organizations such as the *Réseau de personnes ressources pour le développement des compétences des élèves par l'intégration des technologies* (RECITS, formerly known as the *Centre d'enrichissement de la micro-informatique scolaire* or CEMIS). Many of these resources have been tested repeatedly by teachers and modified accordingly, so that they are now easier to build into teaching/learning situations. Moreover, in many vocational education centres, the teaching teams maintain a list of resources for each subject area, which they can use along with other resources to achieve the operational objectives of their programs of study.

The teams also use other computer tools often designed by private businesses for purposes other than teaching. Such tools must be assessed according to the target competencies. In other words, the teacher must make a value judgment concerning the utility of the tools and networks in developing the competencies targeted in the program of study.

Judgments such as these must be based on a careful analysis of the structure and content of the tools. The framework proposed by Reeves (1996 in Minier and Brassard 1999: 46) is very useful here. With regard to structure, the teacher must look at how the software breaks down the content and learning process, and see what traces it leaves of decisions made by the student, and then decide whether these aspects are consistent with the operational objectives of the study units. For the learning process, the teacher must look at the extent to which the software calls on the learning construction, recursive learning and knowledge restructuring processes of students. For the content breakdown, the teacher must identify the objects contained in the software, in the form of declarative information, procedural information and conditional information (Tardif 1992), and ensure that they are consistent with the content and operational objectives of the program. The teacher must also consider the semantic structure of the notions presented in the software, to ensure that it is consistent with the structure established by content specialists in the subject area.

All these aspects are important in assessing the educational potential of software tools and networks for the development of competencies targeted in programs of study. However, two other elements should also be considered. First, the software must serve to "train intelligent assessors of information and technologies, rather than passive user-consumers" (Conseil supérieur de l'éducation 1994: 24; our translation), and second, it must help "develop superior cognitive capacities (reasoning, problem solving and action planning abilities) and social skills (autonomy, communication skills and team skills). All these are relevant to the competencies expected of employees as a result of the impact of ICT on the nature of employment" (Conseil supérieur de l'éducation 1994: 24; our translation).

- Communicates using multimedia resources.

For teachers, this feature of the competency means making use of different computer tools to adapt their teaching to goals and student needs. For example, they may opt for the lecture or demonstration format to present some elements of the subject, using videodisks to illustrate their remarks, offer computer-based practice exercises to students in difficulty before proceeding to the laboratory or workshop, provide students with access to the information networks relevant to the subject under study, use simulation software to help students understand the abstract scientific concepts on which the functions of a given piece of equipment are based, or allow them to practise using and repairing expensive equipment in a secure environment (Conseil supérieur de l'éducation 1994: 35). In other situations, teachers may elect to use participation and results management software to transmit this information to the students and other interested parties via computer communication networks. They may also decide to use an electronic network to contact business representatives when arranging industrial placements for students, or to contact teachers from other vocational education centres to arrange teaching projects.

- Uses information and communications technologies effectively to search for information and solve problems.

For teachers, this feature means being able to understand electronic communications media, decode messages and analyze them critically to solve operational problems.

Understanding electronic communications media involves knowing how the media designers built their information and communications networks, and how they translated subject-specific knowledge into study material. This knowledge forms a vital basis for training that equips people to function in the information society (Conseil supérieur de l'éducation 1994: 24). Teachers who understand the technology media are better able to select relevant information on a given theme or subject.

This feature also involves knowing how to use the different applications of the technology, for example to write texts, plan units, order the materials and tools required for learning activities in the laboratory or workshop, record student absences and performance, contact other teachers, parents and business representatives or present content specific to competency development.

Decoding means being able to give an appropriate meaning to messages that are presented and received in different forms—for example, as text, diagrams, illustrations and so on. This involves mastery of the language of instruction and, given the global nature of modern information and communications, a certain familiarity with a second language.

If teachers understand the electronic communications media and are able to decode messages, they will recognize elements that are relevant to the objects or themes studied and will be able to examine them critically. The objects or themes may be problems specific to the training environment—for example, problems associated with learning certain subject-specific notions, class management, learning evaluation and so on, for which other teachers or other content or learning specialists have devised interesting solutions, among other things through discussion groups.

Thus, a teacher who understands the electronic communications media will be better able to build them into learning activities in the classroom, laboratory or workshop, and also guide the students towards more appropriate learning strategies, by gentle questioning of the paths and avenues they have taken or intend to take.

- Uses ICT effectively to build networks that facilitate information sharing and promote professional development in his or her own field of teaching.

The previous paragraphs considered the role of information and communications technologies as a means of discussing professional issues connected with the subject matter itself or the act of teaching with other teachers or other parties. The creation of "learning communities" as proposed by Christensen, Garvin and Sweet (1994) generates a certain synergy between the work and reflections of individuals with similar interests but located in physically separate locations. In the coming years, these emerging virtual communities have an excellent chance of becoming one of the most fertile sources of intellectual refreshment and continuing education.

- Helps students to familiarize themselves with ICT, to use ICT to carry out learning activities, to assess their own use of ICT, and to exercise critical judgment regarding the information they find on the Internet.

In applying an educational approach focused on the development of competencies, where the student builds his or her own knowledge, teachers must act as guides or mediators. Their job is to help students with their learning by preparing relevant activities and offering support with the learning process.

The same applies to ICT. Teachers must devise teaching/learning situations that will allow the students to acquire both the target competencies and the ability to use the technologies in a productive and integrated way. This means educating students not only to use the technologies professionally, but also to develop a structured, critical judgment, among other things to counter the risk of under-information (Conseil supérieur de l'éducation 1994: 25).

LEVEL OF MASTERY REQUIRED DURING AND AT THE END OF INITIAL TRAINING

During and at the end of his or her initial training, the student teacher should be able to:
✔ *demonstrate critical judgment regarding information and communications technologies, in particular with respect to the development of competencies through the application of educational processes focused on learning and based on the limitations and requirements of the environment*
✔ *identify the potential contribution of computers to the development of superior cognitive skills and social skills by the students*
✔ *create appropriate conditions for the use of ICT by students in the training environment, so that the technology helps them to develop their competencies and thus be more efficient when practising their trade in the workplace*
✔ *make effective use of the different aspects of computer technology to transmit information, maintain dialogue with other teachers, experts and business representatives, collect and analyze data, prepare teaching documents, evaluate learning, etc.*
✔ *become involved in the activities of organizations that design computer software and build it into vocational education in general and the teaching of a given specialty or trade in particular, and undertake continuing education in this respect*

COMPETENCY 9

COMPETENCY STATEMENT
To cooperate with school staff, parents, partners in the community and students in pursuing the educational objectives of the school.

MEANING

As pointed out by Perrenoud (1999: 91), we are currently witnessing "emergent functions" that require transformations of identity on the part of the various partners, along with the construction of new competencies. In creating closer, more public contacts with parents and the community, teachers must voice their opinions and are propelled towards roles that include but exceed their usual concerns regarding the students in their class. It is a change of identity that requires teachers gradually to adopt a community perspective and accept collective responsibility for the educational services given to the families served by the school (Corrigan 1994; Corrigan and Udas 1996).

However, changes of identity do not take place overnight. Relocalization and redefinition of the roles and actions of teachers "lead to a significant questioning of their culture, especially since outsiders do not necessarily accept the parameters and come into the school with their own views on teaching and their place in society" (Raymond and Lenoir 1998: 79; our translation).

Alongside their basic task, teachers must therefore play other roles in different forums, hence the need to be aware of the social impact of their professional activities.

For example, the educational reform plan of action provides for greater independence for schools and vocational education centres (Ministère de l'Éducation 1997a). The review of the *Education Act* created a legal authority for vocational education centres. This has led to a transformation of the *political and administrative context* and even of the relationships between different partners in the education system. As members of the governing board, all the partners, including the teaching staff, must work together to achieve the centre's mission.[5]

A form of partnership has emerged, this time from the balanced budget context that came into force a few years ago. The map of options is an example of this. In addition, *groupings of several vocational education centres* when purchasing equipment for specific programs of study have become common practice, to obtain economies of scale. In such groups, the people responsible for purchasing equipment for the various centres must work closely together, regardless of whether they are teachers or members of the managerial team.

5. A provisional review of the first year of governing board operations suggested that some members have found it difficult to understand the nature of their new powers and to situate the roles of both the members and the other administrative bodies (Ministère de l'Éducation 2000). Follow-up in 1999-2000 highlighted the need for training to help members understand and become familiar with the *Education Act*, and to provide the skills they need to work in partnership.

Generally speaking, people have strong representations that reflect the relationship they have developed with schools during their lives. Parents are no exception to this—on the contrary, it is only by setting aside their prejudices that they will become the best people not only to support their children and encourage them to be successful, but also to encourage them to enroll for vocational training. The role of teachers as providers of information that will incite parents to consider the possibility of vocational education for their children is therefore extremely important.

Businesses play a major role in the planning and organization of vocational education in Québec. As well as being involved in the preparation of programs of study for schools, they take on students as trainees and eventually as employees. Teachers must therefore develop and maintain a network of contacts with businesses for workplace training periods, and also for placement after graduation. The impacts of this type of partnership are significant, and include cooperative education, professional development for teachers in the workplace, and professional development for company employees in schools. The value of schools can only be asserted on the *labour market*, and vice versa.

The review of vocational education programs also provides an excellent opportunity to create or reinforce the *school-university-social and professional community* partnership. Some universities and schools have already entered into collaborative agreements concerning the creation of associate school networks for practical training and special projects. There have also been several innovative initiatives, such as action research in schools, joint supervisory training for teachers and the preparation of practical training guides and evaluation tools. The subject-specific knowledge required for vocational education will obviously be a major component of a teacher training program. Recognition of this type of expertise by universities should encourage student vocational teachers to contribute to the development of a tripartite *university-school-business* synergy.

FEATURES

- Collaborates with other members of the school staff in defining orientations and developing and implementing projects related to educational services in areas that fall under the responsibility of the school.

Teachers who sit on the governing board know their school and its students well. They are able to clarify, explain and defend choices and practices, which presupposes an ability to help define and implement school projects that incorporate collective values.

It is clear that any form of collaborative work involves a genuine, consensual division of functions, roles and responsibilities. If conflicts or misunderstandings occur, the challenge is to reach a compromise or come up with a new idea that represents a step in the right direction. Involvement in project implementation means insisting on a fair division of tasks, monitoring projects with the people responsible and with the students, making suggestions, providing partners with information, requesting and considering their options and deciding on a change of direction where appropriate.

- Supports students involved in the administrative structures of the vocational education centre or in the centre's activities or projects.

The purpose of a vocational education centre, in addition to its mission of instruction and qualification, is to teach students to live together in harmony, to acquire democratic values and to become responsible citizens (Ministère de l'Éducation 1997b). Students can be taught these things in a variety of ways, for example by participating in the school's management structures (governing board) or by participating in the centre's activities or projects. In addition to a strong belief in the students' ability to learn responsibility, teachers will need the capacity to moderate and support if they are to supervise students taking part in the centre's activities. Teachers must promote the ability to listen along with the values of respect and tolerance, so that the students learn to work together, help one another and become resources for one another. Adult students, too, have significant needs in this area, and their ability to meet those needs may make the difference between continuing with the program or dropping out.

- Encourages parents to take an interest in the vocational choices of their children.

The parents of vocational stream students may be asked to contribute certain resources or interests to a given project. The competitions held in many vocational and technical fields are good examples of this. It would be beneficial if more parents became personally involved, supporting their children and helping them to train for local, regional, national and international competitions. For teachers, involving parents in the life of a vocational education centre means first and foremost countering the prejudices against vocational education and asserting the value of the child's vocational choices. Involving parents in the centre's activities is certainly a challenge, but it can also be an opportunity to encourage children to continue their education in their chosen field.

- Develops and maintains contacts with social and professional partners.

At the end of their programs, some students are able to move smoothly on to the first step of their professional lives as they enter the labour market for the first time. In Québec, teachers from the vocational sector are largely responsible for maintaining contacts between the educational and business communities. They listen to the manpower needs and everyday concerns of businesses, and must develop and maintain relationships based on trust.

The students are the first to benefit from this type of relationship, first because they receive vocational education that enables them to become effective practitioners of their chosen trade or profession, and second because they have access to practical training in the workplace and opportunities to apply the knowledge and skills acquired at school in a natural setting.

LEVEL OF MASTERY REQUIRED DURING AND AT THE END OF INITIAL TRAINING

During and at the end of his or her initial training, the student teacher should be able to:
✔ *situate his or her role in relation to that played by other internal or external resource persons, so that every individual complements and is respectful of the competencies of the others*
✔ *adjust his or her actions to the educational objectives of the school and contribute to the attainment of these objectives by suggesting possible improvements and becoming personally involved in school projects*
✔ *build a relationship of trust with the various partners*

COMPETENCY 10

COMPETENCY STATEMENT
To cooperate with members of the teaching team in carrying out tasks involving the development and evaluation of the competencies targeted in the programs of study, taking into account the students concerned.

MEANING

The ability to work as part of a team is one of the most important aspects of the new trend in teaching, namely collective professionalism. Widely regarded a goal that must be achieved, collective professionalism has become necessary as a result of the malaise that developed as the teaching profession was reduced over the years to a set of isolated, individual actions (Bisaillon 1993). The teacher's judgment was confined to the classroom, restricted to an increasingly limited set of objects and constituting, over the years, a kind of "private jurisprudence that remained secret and hidden from other teachers" (Gauthier et al. 1997: 232; our translation). Continuity and consistency in teaching, both within the same year and from one year to the next, are necessary to foster success and prevent students in difficulty from dropping out.

Many teachers already work as part of a team, and others appear to be in favour of a form of organization and timetable that would allow them to do so. Collaboration between teachers is constructed differently, depending on the educational level. The teaching team in a department acts as the reference group, conveying behavioural standards and the parameters of professional identity, and makes many of the decisions concerning learning content distribution, timetable structure and the use of classrooms, textbooks and teaching materials (Tardif and Lessard 1999; Glatthorn 1998).

The scope of the curriculum-related decisions made by teachers and the fact that several teachers must work with the same set of students, means that even more intensive task sharing and collaboration is required. Working together to achieve student learning means agreeing on coherent pedagogical choices and the steps in the competency mastering process. In addition to interpersonal skills, tolerance and empathy towards others, this means the ability of program team members to build common goals and strategies applicable to the students for whom they are collectively responsible.

FEATURES

- Recognizes instances where cooperation with other members of the teaching team is required in order to design or adapt teaching/learning situations, to evaluate student learning or to promote the mastery of competencies.

A team is not necessarily effective simply because its members do everything together. Sometimes it is better to delegate or have members work in small groups or individually. The members of a teaching team must be able to judge which type of cooperation is best for the task or problem at hand. Sometimes, a simple exchange of resources or materials will be enough. At other times, the whole team will have to work intensively to make structuring decisions, such as establishing training methods (cooperative education), agreeing on evaluation content or selecting materials for use by the students. Some projects can be carried out by a few members of the team, while the others work to help students in difficulty. This means the team members must be familiar with their individual and collective resources and apply them fairly to ensure that the students have the best possible support in the various training locations.

- Develops and organizes projects appropriate to the objectives to be attained by the teaching team.

Projects are complex activities that call on several competencies, depending on when they are carried out—for example, setting objectives, establishing and implementing a plan of action, identifying resources and assessing their impact. Building and implementing projects as part of a team calls on the same competencies, but in a team context. Thus, team members must begin by agreeing on the vision of the project and the issues at stake. If possible, they must also clarify and standardize their understanding of the project. Establishing a plan of action involves dividing and coordinating tasks and leadership, identifying and using resources, setting a timetable and allowing for verification and adaptation if necessary. Clear, effective communication between team members is vital throughout the project. The team must have the information it needs to decide whether to stay on the same course or change direction. Team members must have good observation, judgment and analytical skills; as they exchange ideas on student behaviour, they will need to check the perceptions of their colleagues, make a series of micro-decisions and adjust their actions to take into account significant details of student reactions. Evaluating the project means agreeing on criteria, working together to judge its value and agreeing on how to reinvest it. Clearly, the depth of these competencies will vary according to the context—for example, a specific teaching activity or an element of life at work (Perrenoud 1999). Independently of project objectives, cooperation between team members means that each individual must be free to speak, make proposals and listen to what his or her colleagues have to say, contribute resources, take responsibility, clearly establish his or her limits and requirements, carry out tasks and report to others.

- Cooperates in an active, ongoing manner with the teaching teams working with the same students.

Research into teaching has revealed many different forms of educational cooperation. Cooperation does not usually involve a colleague's presence in the classroom (Acker 1999; Tardif and Lessard 1999). However, generally speaking, cooperation seems to be desired more than it is practised and sustained by teachers in different educational activities (Tardif and Lessard 1999: 420). Hargreaves (1994) pointed out that many forms of cooperation between teachers are the result of administrative pressures, a phenomenon he describes as "forced collegiality." According to Perrenoud (1999), forming a teaching

team to work with the same students is the most demanding element of the cooperative competency.

Major curriculum reforms are in fact excellent opportunities to apply, share and renew the competencies of school staff. By forming teaching teams and task forces, it is possible to anchor orientations and changes in the history, values and resources of team members. The innovations proposed allow the members, both individually and collectively, to reinterpret their experience, review the progress that can be used to support the change, and realistically assess the steps required to implement the change gradually. It is on the basis of such reinterpretations and reviews that the team will construct its path towards the type of cooperation it needs to make students jointly responsible.

Teamwork requires a set of procedures and methods that will enable the group to function and persist—for example, timetables, agendas, a clear description of the types of decisions required, task distribution methods and monitoring mechanisms. A healthy team dynamic also requires several communication and psychosocial competencies: adopting a collective viewpoint or "decentred posture" (Perrenoud 1999: 82) that places the group's objectives and interests above individual interests; selecting and regulating types of leadership appropriate to the tasks to be carried out; making sure all members are heard; listening carefully and observing the reactions of other members; checking one's own interpretations of the other members' reactions; and identifying and countering resistance.

In addition to the competencies and know-how related to group operations, it is also necessary for teachers to reposition themselves with regard to the attitudes that form part of the teaching culture—for example, the tendency to work alone, to consider the class as one's personal territory, and to consider one's teaching choices as being mainly the result of personal preferences. Collective responsibility for students means that teachers must be prepared to exchange ideas on a sustained and daily basis concerning practices, meaning, the reasons for their actions and, in the longer term, the construction of common aims and meanings.

- Helps build consensus, when required, among members of the teaching team.

Consensus depends on the existence of shared aims and meanings and healthy conflict resolution. Shared meaning is particularly important in teaching. Teachers have usually been accustomed to working alone, and their educational vocabulary, while apparently identical to that of other teachers, will gradually have become associated with their own unique practices, beliefs and feelings. Discussions on classroom materials, coursework and individual practices, collective development of practices and, eventually, mutual observation or team teaching can provide concrete reference elements on which to build and anchor shared meanings.

Differences of opinion, conflicts and occasional crises are a fact of life for groups that work together over long periods. Such situations require interpersonal skills including the ability to listen, respect for others, and the ability to exchange ideas in such a way that every member is sure of being heard. Appropriate conflict resolution involves anticipating conflicts, i.e. identifying different positions and resistance, clarifying them and taking

them into consideration. The parties to the conflict must clearly indicate the boundaries they are unwilling to step over and the types of contributions they are willing to make.

LEVEL OF MASTERY REQUIRED DURING AND AT THE END OF INITIAL TRAINING

During and at the end of his or her initial training, the student teacher should be able to:
✔ *contribute to the work of the teaching team in an effective manner*
✔ *provide constructive criticism and make innovative suggestions with respect to the team's work*

COMPETENCY 11

COMPETENCY STATEMENT
To engage in professional development individually and with others.

MEANING

Professional development for teachers in the vocational sector has always been a concern for teacher training institutions and the vocational education centres that employ teachers.

In the 1960s, the École normale de l'enseignement technique (ENET, or technical teacher training college) began to offer a training program that included industry-based professional development periods. The practice became more widespread in the 1970s and 1980s, when the universities, taking over from the ENET, offered programs as part of their Vocational Teacher Training Development Program (VTTDP) that included individual and group professional development activities. The program, introduced by the Ministère de l'Éducation du Québec, was extremely innovative, and offered two components, namely training and research. Thus, teachers could obtain basic vocational training and also undertake research, for example into the educational tools required to teach their specialty subject or trade. The program was very popular among teachers at the time, and many of them took advantage of it to improve their professional skills.

However, the continuous professional development culture in the vocational education sector declined somewhat in the early 1990s, for a variety of reasons. For example, the "research" component was removed from the VTTDP, large numbers of teachers retired and the teaching conditions in the vocational sector changed considerably. As a result, fewer teachers had access to professional development through industrial training or research and development projects.

The situation has improved in the last few years, however, and the number of vocational teachers enrolling for professional development activities has grown. Even so, on-the-job training in the form of industrial placement periods is still not common practice for teachers (COFPE 1998: 33).

Clearly, then, the continuous professional development culture needs to be strengthened in the vocational sector. For many teachers, this will be a major change in their professional lives, because they will be forced to shift from "an individualistic vision of professional development to a collective vision, where the teacher is regarded as an individual working within a team of people who, together, have development objectives that will allow them to help their school evolve towards the goal of educational success for all students" (Dolbec and Savoie-Zajc 1997: 6; our translation). Continuous professional development is considered here to mean a set of actions and activities to which practising teachers commit both individually and collectively, with the goal of updating and enriching their professional skills (Ministère de l'Éducation 1999: 9).

All this suggests that continuous professional development for teachers in the vocational sector, whether individual or a collective, must form part of the overall development plan for the specialty subjects or trades concerned, and should benefit the teachers who teach those subjects or trades. A plan is described as "overall" when it takes into consideration the individual and collective responsibility of teachers to train a qualified work force able to meet the needs of business and society, as required by the programs of study. Regardless of the content, scope and relevance of the plan, its implementation depends to a large extent on the commitment of the teaching staff, which itself depends on the teachers' attitude to the development of teaching in the vocational sector. Its implementation is also dependent on the extent to which society values continuous professional development, manifested by the existence of favourable conditions such as the inclusion of training periods in the teacher's work schedule.

FEATURES

- Takes stock of his or her competencies and takes steps to develop them using available resources.

To teach in the vocational sector, teachers must follow social developments. This means primarily the technical and technological developments affecting the specialty subjects they teach, which normally occur in industry. However, it also means changes in the nature of work itself, such as those discussed in relation to information and communications technologies (see Competency 8), as weli as changes in training orientations, especially with regard to paradigms, as is the case in the vocational education reform, where emphasis will be placed in future on learning rather than teaching.

Changes such as these (in the trade itself, in the nature of work and in educational paradigms) usually occur within every professional career. Teachers would therefore benefit by following the trend and playing an active role in it throughout their professional lives, so that they are always able to adapt their competencies to the requirements of their profession.

Clearly, if they are to be able to adapt, teachers must have certain competencies when they are admitted to the teacher training program, in particular with regard to their chosen field, specialty subject or trade. Professional development can then be based on existing subject-specific competencies that are refreshed and then applied in areas that have not yet been explored in detail, while maintaining a certain balance between what is familiar and what is new, the effort required and the support available.

In the professional development process, it is up to the teachers to take the steps they feel are most appropriate to achieve the target objectives. Whatever form these steps take (portfolio, professional autobiography, etc.), they should consider the professional development process first and foremost as "an exercise in professional lucidity" (Perrenoud 1999: 5). It allows them to review what they know, what they can do and how they feel towards their disciplinary field and teaching practice, how they go about acquiring knowledge, expertise and attitudes, and what resources they think would be useful to other teachers in their disciplinary field. It should allow them to demonstrate what they know in terms of disciplinary knowledge, experience and other recognizable

aims within the teacher training program. At the same time, they should be able to identify their professional development needs—for example, the need to upgrade certain knowledge in order to teach all the units in the program, the need for technical or technological professional development activities, the need for training in the organization of work as a result of innovations in the technology sector, or the need for pedagogical development following the introduction of new paradigms, new training approaches or other changes to teaching and learning.

- Takes part in customized training sessions and industry training periods.

To upgrade and acquire new technical, technological and organization of work competencies, teachers often require customized training or industry training periods. Such methods enable teachers not only to update their knowledge, but also to acquire new knowledge that they can then use to adapt their teaching quickly to the demands of the labour market and hence foster an appropriate transfer of competencies to their students. However, they are effective only if accompanied by thinking within and pertaining to an action context (Karolewicz 1998; Schön 1994; St-Arnaud 1992). The thinking process allows teachers to look critically at their new knowledge and identify the elements that will be important for their teaching.

- Discusses the relevance of his or her pedagogical and didactical choices with his or her colleagues.

Professional development by peers is often described as an essential condition for pedagogical change and the transfer of expertise in the workplace (Brossard 1998; Conseil supérieur de l'éducation 1995; Gordon and Nicely 1998; Ouellet 1998).

Career teachers talk about the central role of peers in their professional development (Corriveau 1999: 34). Discussions on the relevance of pedagogical choices are only possible if teachers are willing to break through the structure often imposed by an organization of work that divides teaching into program units according to the expertise of the teachers who are available. This type of structure is likely to create "pedagogical ghettos" and prevent teachers from initiating and maintaining productive, fruitful discussions. In contrast, an organization of work based on the teachers' ability to teach most of the program units fosters the emergence and maintenance of a community of "teacher-learners" (Christensen, Garvin and Sweet 1994) within which it is possible to have rich discussions about the choice of teaching methods.

If a community of "teacher-learners" is to be created and maintained, time and space must be set aside and the appropriate conditions established. Similarly, a climate of trust must be established, where teachers can exchange views and opinions as equals, and where the "teacher-learner" can explain his or her ideas without imposing them, while the "learner-teachers" listen to and discuss those ideas from the standpoint of developing student competencies. It is often in this type of context that effective pedagogical and didactical choices acceptable to all members of the teaching team can be identified.

☛ Reflects on his or her practice and makes the appropriate adjustments.

Reflexive analysis goes beyond the current mental activity and discussion of ideas that underlies any professional practice, and involves a desire to learn methodically from experience and to change one's practice from year to year (Perrenoud 1999: 154). For teachers, thinking methodically about their experience or actions means developing a process and methods to understand what works well and less well in certain situations and to devise possible solutions. It also means testing the solutions through action.

Once the testing has been done, teachers must identify the main elements of the results in order to decide what they feel is the most productive method. They also establish links with theoretical principals, thus giving structure and meaning to their actions. Taking the time to think about what they do is part of the learning process and hence the enrichment of the teachers themselves and the organization for which they work. Failure to do so leads inevitably to professional decline (Karolewicz 1998: 41).

Structured thinking that emphasizes a specific element of vocational teaching and learning (exercises or practical work by students, use of ICT in the workshop, the training process, competency evaluation, etc.) is therefore based on action, from which a method sometimes akin to *idiosyncrasy* (Schön 1994) can emerge through repeated alternation between thinking and application. However, the method must be explained by theoretical principles from different sources (research, textbooks, discussion groups, etc.), so that it has a meaning for the person applying it. This structured procedure takes the form of a report in which the different steps are detailed. The report is accompanied by relevant documentation illustrating the development of the teacher's practice.

☛ Spearheads pedagogical projects to solve teaching problems.

Many of the professional development strategies that have emerged in recent years call into question the image of the teacher as a receiver, consumer and transmitter of knowledge produced by others (Cochran-Smith and Lytle 1999; Schoonmaker, Sawyer and Borrego Brainard 1998). The vocational education sector has long understood this, and it is has often been said that emphasis should lie on the creation and strengthening of training devices focused on learning, in which teachers act as specialists, mediators and learning guides. In playing these roles, they are acting as true professionals, i.e. as responsible, independent people able to think during and about their own actions, and to generate knowledge from that action (Schön 1994).

In the vocational education sector, the ability to generate knowledge is illustrated very well in the course of pedagogical projects. "Whether in architecture, information systems engineering or learning system design, the engineering problems are similar: the solution is a system that must be built (or modified) to meet certain constraints, initially very loosely defined, which need to be clarified both in the initial analysis phase and subsequently throughout the process" (Paquette, Crevier and Aubin 1997: 1; our translation). In vocational teacher training, a pedagogical project is a process to solve concrete problems applied by a teacher to one or more components of his or her teaching practice. The problem solving process can be applied to the design and testing of teaching material, teaching/learning scenarios, new class management strategies, teaching

formulas and so on. In short, it can be used on any aspect of teaching that needs to be called into question and improved.

☛ Undertakes research related to the mastery of the competencies targeted in the programs of study and to the educational objectives of the vocational education centre.

Programs of study for vocational students have very different aims. Some will train people to repair appliances, while others will train them to apply a rigorous procedure for the design of technical objects, figures or models.

Regardless of the program aims, however, teachers often apply the same didactic approach, in which they first transmit the theory, and then administer classroom exercises and laboratory or workshop tasks. Given the diversity of program aims, and in view of the new paradigm that emphasizes learning rather than teaching (see Competency 3), teachers now need to take a critical look at this approach, in terms of their own role and that of their students.

The calling into question of current pedagogical practices will only be effective if teachers form teaching teams based on the disciplinary subjects or trades being taught. It will be even more effective if the teams engage in research-action-training (Goyette 1991) or collaborative research procedures (Boucher and Vachon 1995: 153) with a view to documenting, analyzing and understanding the practices being developed. Leadership must be exercised and numerous resources deployed if colleagues are to commit personally to such procedures. This involves setting specific targets, aiming for goals that are accessible in the medium term, creating new roles (team leader, resource identification officer, etc.) and new working structures that allow for task sharing, establishing training needs, consulting or involving colleagues from another training centre or outside resource people such as representatives of industry or other training centres, agreeing on the indicators of competency development for team members, and circulating the results of such procedures to students, colleagues, parents, business representatives, professional associations and school boards.

LEVEL OF MASTERY REQUIRED DURING AND AT THE END OF INITIAL TRAINING

During and at the end of his or her initial training, the student teacher should be able to:
✔ *establish a list of his or her competencies in order to recognize what he or she already knows, and draw up a continuous professional development plan that will allow him or her to keep up with changes and teach the disciplinary subject in question*
✔ *identify, understand and use the available resources required for education in general and vocational education in particular (technical literature, research reports and professional literature, pedagogical networks, data banks)*
✔ *spearhead pedagogical projects on specific aspects of his or her teaching*
✔ *participate actively in research projects related to mastery of the competencies targeted in the programs of study and to the educational objectives of the vocational education centre*

COMPETENCY 12

COMPETENCY STATEMENT
To demonstrate ethical and responsible professional behaviour in the performance of his or her duties.

MEANING

Professionalism is a state or attitude developed by a person as part of a professional socialization process, by which he or she accepts the common standards shared by the professional group. Teachers are expected to exhibit professionalism, i.e. to comply with the generally accepted procedures and standards of the profession (Bourdoncle 1991).

If they are to exhibit professionalism, new teachers must commit themselves in their actions—in other words, they must hold the conviction that the students under their authority can be educated (Meirieu 1989). Professional teachers are therefore expected to demonstrate professional awareness, i.e. a form of commitment, an obligation of diligence (Ministère de la Culture et des Communications 1998) that leads them, within the bounds of their professional supervisory duties, to take care of the students entrusted to them.

According to Lang (1999), when professional autonomy increases, the teacher's responsibility is engaged more strongly. Professional autonomy therefore refers to the individual's ethic of responsibility. In the context of the current reform, which gives teachers and the school team much more autonomy and independence of action, it will be vital for teachers to justify their actions and answer for what they do in the classroom or at school. As professional resource people mandated by society and enjoying substantial autonomy, teachers must therefore be able to argue their decisions publicly. They must be able to explain and justify the significance and relevance of their choices if necessary, with their colleagues, with the school management, with parents and with students. Between the obligation to submit to the demands of another person on the one hand, and a closed attitude to influence on the other, there is space for a discursive competency that must be developed by any professional providing a public service.

This ethical competency refers to what some people call the "discursive ethic trend" (Jeffrey 1999). In the classroom, the competency "evokes the capacity to construct a moral position, to discuss that position, to describe a moral problem, to implement rules for healthy discussion, to seek out the principles and values that form the basis of the legislation that governs us, to work on accepting and acknowledging all individuals regardless of their differences, to think about the best form of government, the best justice, the ritualization of violence, to regard propriety, rules of conduct and social standards as problems, to seek to justify decisions, and to question issues relating to obligation and constraint" (Jeffrey 1999: 85; our translation).

The discursive ethic is therefore closely related to culture, in that it requires knowledge of human beings, societies and cultures in order to understand the moral problems that may arise in the classroom. It seeks to develop quality arguments that go beyond common sense, and to implement frameworks conducive to democratic discussion, the creation of fair standards and the preparation of policies at the service of the common good (Jeffrey 1999).

FEATURES

☛ Understands the values underlying his or her teaching.

Teaching is a job in which an adult exercises influence over other people, i.e. the students (Fourez 1990). It is a moral craft (Tom 1984), a profession saturated with sometimes contradictory values. As Perrenoud (1993) asked: Should we give priority to the needs of a particular individual or group? Respect individual identities, or change them? Prioritize differences or eliminate them? Commit personally or remain neutral? Impose our will to be more effective or negotiate at length, even if this leads to incomplete action? Sacrifice the future or the present? Emphasize knowledge or socialization? Insist on structured thought or expression and creativity? Promote active pedagogy or mastery? Like all the students or demonstrate sympathy and antipathy? Future teachers must think about their values and the prejudices underlying their actions, and carefully observe their impacts on the students' individual and collective well-being. Reflexive analysis, supported by structured steps, appears to be appropriate for this purpose.

☛ Manages his or her class in a democratic way.

A class is like a micro-society, exhibiting the same tensions as society itself (violence, racism, sexism, etc.). Students will not be able to solve their differences spontaneously and democratically, and must therefore learn to build and use attitudes and behaviours that do not lead to exclusion. Teachers can, for example, use the class council and a cooperative approach to help the students settle classroom conflicts in a democratic way.

☛ Provides students with appropriate attention and support.

The definition of "professional" cannot be reduced to a set of external behaviours or competencies exclusive of personal commitment. On the contrary, "a professional is a person who is able to apply his or her subjectivity and personal identity in his or her professional life" (Le Boterf 1997: 25; our translation). In this respect, society expects that a teacher will be solicitous (Meirieu 1991) and exhibit the same level of care and diligence towards his or her charges as would normally be exhibited by any professional resource person in similar circumstances. The duty of diligence, as opposed to the notion of negligence, in the exercise of professional duty is therefore an important part of professional ethics.

As violence becomes ritualized, teachers must also be more aware of open or hidden hostile actions by students. "Small pernicious actions are so common that they appear to be the norm. It all starts with a lack of respect, a lie or manipulation. We only find it

difficult to bear if it affects us personally. Then, if the social group in which the behaviour takes place does not react, it gradually develops into openly hostile acts that have serious impacts on the psychological health of the victims, who are not certain of finding a sympathetic ear and therefore keep quiet and suffer in silence" (Hirigoyen 1998: 206; our translation). As this same author points out, "it is sometimes enough for just one person to express his or her belief" (our translation). In reality, that person is often the teacher, who must be attentive to the students' personal problems. The potential consequences of hostile or violent acts are serious; we need only think of the bullying incidents and tragedies that have occurred in schools in the last fifteen years.

- Justifies his or her decisions concerning the learning and education of students to the parties concerned.

Vocational teachers cannot be held responsible for the outcome of their students' learning. This postulate is based on a number of reasons, including the fact that students admitted to the program have followed different paths—unbroken in some cases, going directly from school to university and then into vocational education, and broken in others, going from high school to the employment market and then into vocational education (COFPE 1998: 16). It is also based on the fact that so many people have been involved in the process before, at the same time as and after the teachers, and the context in which they work may well compromise their success. It is therefore difficult to place sole responsibility for classroom, workshop or laboratory learning on the shoulders of the teacher. However, it is reasonable to expect teachers to accept responsibility, jointly with their colleagues, for the methods they use to instruct and educate their students, thus responding to the desire to "shift from individual responsibility for student success to group responsibility for the learning achieved by all the students. Similarly, there must be a shift from teaching focused on content to teaching focused on the competencies to be mastered by all students. This is true of all educational levels" (Bisaillon 1993: 228; our translation).

Teachers must therefore be able to prove, especially to their colleagues in the same disciplinary area, that they have applied the best possible means, in the circumstances, to promote student development. Thus, professional responsibility is impossible without reference to research data and the teacher's ability to conduct projects in the training environment and document the progress made and results achieved.

- Respects the confidential nature of certain aspects of his or her work.

In their work, teachers come into contact with personal information entrusted to them by the internal and external partners working with the students, and by the students themselves. If they are not aware of the need to respect the confidentiality of that information, they may succumb to the temptation of disclosing some or all of it in non-work-related situations. Teachers therefore have an obligation of discretion and reserve in the use of personal information concerning colleagues, students or the families of students.

☛ Avoids any form of discrimination toward students, parents or colleagues.

In a pluralist society such as ours, there is a broad range of values and views. The classroom, workshop, laboratory or vocational education centre is a kind of focal point that brings together students (young people and adults) of different origins, with different mother tongues, belonging to different religions, races, social classes and so on. Vocational teachers have a particular role to play in this respect; they must avoid situations conducive to discrimination or exclusion and implement mechanisms to ensure equity and respect for differences, in accordance with the provisions of the Charter of Human Rights and Freedoms.

☛ Situates the moral conflicts arising in class with reference to the major schools of thought.

If they are to analyze the moral problems that occur in a classroom (sex, violence, drugs, etc.) and discover ways of addressing them, teachers must apply specific cultural knowledge, otherwise they risk reproducing prejudices leading to different forms of exclusion. Moral positions have changed over time, and have an impact on how problems are analyzed and which solutions are proposed. It is therefore vital for teachers to be able to situate moral problems with reference to the major schools of thought (philosophical, historical, social, political, psychological), understand their prejudices, make informed choices and assume those choices both personally and publicly.

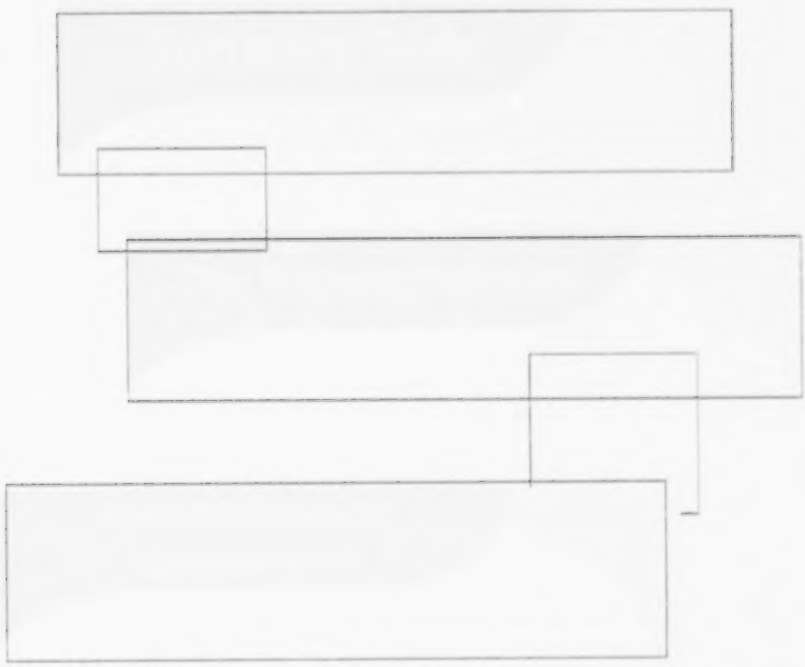
☛ Demonstrates sound judgment in using the legal and regulatory framework governing the teaching profession and the trade being taught.

Teaching is governed by a legal and regulatory framework. The *Education Act* sets out the obligations and rights of teachers, and the collective agreement stipulates the rules with which teachers must comply under their contracts of employment. Some trades also have their own codes, and workplace health and safety regulations apply to all trades. Thus, teachers must perform their duties in compliance with the demands of the regulatory framework governing their profession and the trade being taught.

LEVEL OF MASTERY REQUIRED DURING AND AT THE END OF INITIAL TRAINING

Although teaching is a moral craft (Tom 1984), the moral competency has often been neglected in teacher training. In a pluralist society where different views abound and where relationships with authority have changed substantially, it is important to emphasize this aspect in schools and in teacher training.

During and at the end of his or her initial training, the student teacher should be able to:
✔ *demonstrate sufficient responsibility in dealings with students that one can recommend, without reservation, that a class be entrusted to his or her care*
✔ *answer to others for his or her actions by providing well-founded reasons*



To act as a professional inheritor, critic and interpreter of knowledge or culture when teaching students.

Situates the discipline's basic benchmarks and points of understanding (concepts, postulates and methods) in order to facilitate meaningful, in-depth learning by students.

Adopts a critical approach to the subject matter.

Establishes links between the secondary culture set out in the program and the secondary culture of the students.

Transforms the classroom into a cultural base open to a range of different viewpoints within a common space.

Casts a critical look at his or her own origins, cultural practices and social role.

During and at the end of his or her initial training, the student teacher should be able to:

- understand the subject-specific and program-specific knowledge to be taught, so as to be able to promote the creation of meaningful links by the students
- exhibit a critical understanding of his or her cultural development and be aware of its potential and limitations
- exhibit a critical understanding of the knowledge to be taught, so as to promote the creation of meaningful links by the students
- establish links with the students' culture in the proposed learning activities

To communicate clearly in the language of instruction, both orally and in writing, using correct grammar, in various contexts related to teaching.

Uses appropriate language when speaking to students, peers and business representatives.

Observes rules of grammar and stylistics when writing texts intended for students, peers and business representatives.

Is able to take up a position, support his or her ideas and argue his or her subject matter in a consistent, effective, constructive and respectful way during discussions.

Communicates ideas concisely using precise vocabulary and appropriate syntax.

Corrects the mistakes students make when speaking and writing.

Constantly strives to improve his or her own oral and written language skills.

During and at the end of his or her initial training, the student teacher should be able to:

- master the rules of oral and written expression so as to be understood by most of the linguistic community
- express himself or herself with the ease, precision, efficiency and accuracy expected by society of a teaching professional

To develop teaching/learning situations that are appropriate to the students concerned and the subject content with a view to developing the competencies targeted in the programs of study.

Interprets the aims, competencies and subject content specified in the programs of study.

Plans teaching/learning sequences according to the logic of the content to be taught and the development of learning.

Takes into account the prerequisites, representations and special interests of the students when teaching the subject matter.

Establishes connections between the trade being taught and workplace health and safety issues when developing teaching/learning situations.

Anticipates obstacles to learning in the teaching of program content.

Plans teaching/learning situations that provide opportunities to consolidate knowledge.

Plans learning situations that provide opportunities to apply competencies in different contexts.

Considers social differences when preparing teaching/learning situations.

During and at the end of his or her initial training, the student teacher should be able to:

- master the program(s) of study for the specialty subject(s) or trade(s) being taught
- master the program(s) of study for the specialty subject(s) or trade(s) being taught
- design teaching/learning activities that will promote the development of the target competencies in the program(s) of study and that take into account workplace health and safety regulations and the constraints and requirements of the environment

COMPETENCY 6

To pilot teaching/learning situations that are appropriate to the students concerned and to the subject content with a view to developing the competencies targeted in the programs of study.

Essential Elements

involves the students in meaningful situations designed to help them develop competencies.

Provides students with the resources they need to complete the learning activities.

Guides students in understanding elements of learning situations, in selecting, interpreting and understanding the information provided in the various resources, in selecting and using equipment, accessories, tools and materials safely, and in carrying out learning activities.

Supports student learning by asking questions and providing frequent and relevant feedback to promote the consolidation, integration and transfer of learning.

Encourages teamwork.

Criteria

During and at the end of his or her initial training, the student teacher should be able to:

guide students, through appropriate interventions, in carrying out learning activities as part of the program's competency acquisition process, taking into account the specific features of the environment

detect teaching/learning problems that arise in the application of the competency acquisition process and use the appropriate resources to remedy them

To evaluate student progress in learning the subject content and mastering the related competencies.

Gathers data as students are engaged in a learning situation in order to identify their strengths and weaknesses and to review and adapt his or her teaching accordingly to help them progress.

Takes stock of the learning acquired by students in order to assess their mastery of the related competencies.

Designs or uses tools to evaluate student progress and mastery of competencies.

Communicates expected outcomes to students and the other people concerned, and provides feedback on student progress and mastery of competencies using clear, simple language.

Works with the teaching team to determine the stage of progression within the program of study.

During and at the end of his or her initial training, the student teacher should be able to:

- detect the strengths and weaknesses of the students in a learning situation
- in cooperation with the students, undertake a process of reflection on their actions, so that they are able to evaluate their own progress towards mastering the target competencies of the program of study, and where applicable, identify and apply methods that will enable them to continue to progress
- carry out summative evaluation of the competencies to be mastered by the students
- collaborate with colleagues in designing communication tools to inform students, those responsible for them and other interested persons of the development of the competencies targeted by the training program or programs

To plan, organize and supervise a class in such a way as to promote students' learning and social development.

Develops and implements an efficient system for running regular classroom activities.

Communicates clear requirements regarding appropriate school and social behaviour in the classroom, laboratory or workshop, and makes sure that students meet those requirements.

Involves students on an individual or a group basis in setting standards for the smooth running of the class.

Develops strategies for dealing effectively with inappropriate behaviour when it occurs.

Maintains a classroom climate that is conducive to learning.

During and at the end of his or her initial training, the student teacher should be able to:

- apply systems, either individually or with other members of the teaching team for the subject or trade, to ensure that the group's regular activities in the workshop, laboratory or classroom are both effective and safe
- identify and solve organizational problems that hinder the group's regular activities in the workshop, laboratory or classroom, either individually or with other members of the teaching team for the subject or trade
- anticipate some of the organizational problems that hinder the smooth running of the class and apply measures to prevent them
- work with the students to help them think about their actions so that they become aware of the impacts of those actions on their own training and that of other students in the class, and where applicable, implement solutions that will improve matters
- help students who behave inappropriately to solve their problems and, where necessary, make and enforce decisions that will improve the situation of those students and of the class(es) affected by their behaviour

To adapt his or her teaching to the needs and characteristics of students with learning disabilities, social maladjustments or handicaps.

Facilitates the educational and social integration of students with learning disabilities, social maladjustments or handicaps.

Consults resource people to obtain background information on students with difficulties (needs, progress, etc.).

Proposes learning tasks, challenges and roles within the class that help students to progress.

Participates in developing and implementing individualized education plans.

During and at the end of his or her initial training, the student teacher should be able to:

- exchange ideas with other teachers in order to draw up an appropriate teaching plan
- adapt his or her teaching to the specific difficulties of individual students

To integrate information and communications technologies (ICT) in the preparation and delivery of teaching/learning activities and for instructional management and professional development purposes.

Anticipates the issues and judges the potential and limitations of information and communications technologies.

Assesses the instructional potential of computer applications and networking technology in relation to the development of the competencies targeted in the programs of study.

Communicates using multimedia resources.

Uses information and communications technologies effectively to search for information and solve problems.

Uses ICT effectively to build networks that facilitate information sharing and promote professional development in his or her own field of teaching.

Helps students to familiarize themselves with ICT, to use ICT to carry out learning activities, to assess their own use of ICT, and to exercise critical judgment regarding the information they find on the Internet.

During and at the end of his or her initial training, the student teacher should be able to:

- demonstrate critical judgment regarding information and communications technologies, in particular with respect to the development of competencies through the application of educational processes focused on learning and based on the limitations and requirements of the environment
- identify the potential contribution of computers to the development of superior cognitive skills and social skills by the students
- create appropriate conditions for the use of ICT by students in the training environment, so that the technology helps them to develop their competencies and thus be more efficient when practising their trade in the workplace
- make effective use of the different aspects of computer technology to transmit information, maintain dialogue with other teachers, experts and business representatives, collect and analyze data, prepare teaching documents, evaluate learning, etc.
- become involved in the activities of organizations that design computer software and build it into vocational education in general and the teaching of a given specialty or trade in particular, and undertake continuing education in this respect

To cooperate with school staff, parents, partners in the community and students in pursuing the educational objectives of the school.

Collaborates with other members of the school staff in defining orientations and developing and implementing projects related to educational services in areas that fall under the responsibility of the school.

Supports students involved in the administrative structures of the vocational education centre or in the centre's activities or projects.

Encourages parents to take an interest in the vocational choices of their children.

Develops and maintains contacts with social and professional partners.

During and at the end of his or her initial training, the student teacher should be able to:

- situate his or her role in relation to that played by other internal or external resource persons, so that every individual complements and is respectful of the competencies of the others
- adjust his or her actions to the educational objectives of the school and contribute to the attainment of these objectives by suggesting possible improvements and becoming personally involved in school projects
- build a relationship of trust with the various partners

To cooperate with members of the teaching team in carrying out tasks involving the development and evaluation of the competencies targeted in the programs of study, taking into account the students concerned.

Recognizes instances where cooperation with other members of the teaching team is required in order to design or adapt teaching/learning situations, to evaluate student learning or to promote the mastery of competencies.

Develops and organizes projects appropriate to the objectives to be attained by the teaching team.

Cooperates in an active, ongoing manner with the teaching teams working with the same students.

Helps build consensus, when required, among members of the teaching team.

During and at the end of his or her initial training, the student teacher should be able to:

- contribute to the work of the teaching team in an effective manner
- provide constructive criticism and make innovative suggestions with respect to the team's work

COMPETENCY 11

To engage in professional development individually and with others.

Takes stock of his or her competencies and takes steps to develop them using available resources.

Takes part in customized training sessions and industry training periods.

Discusses the relevance of his or her pedagogical and didactical choices with his or her colleagues.

Reflects on his or her practice and makes the appropriate adjustments.

Spearheads pedagogical projects to solve teaching problems.

Undertakes research related to the mastery of the competencies targeted in the programs of study and to the educational objectives of the vocational education centre.

During and at the end of his or her initial training, the student teacher should be able to:

- establish a list of his or her competencies in order to recognize what he or she already knows, and draw up a continuous professional development plan that will allow him or her to keep up with changes and teach the disciplinary subject in question
- identify, understand and use the available resources required for education in general and vocational education in particular (technical literature, research reports and professional literature, pedagogical networks, data banks)
- spearhead pedagogical projects on specific aspects of his or her teaching
- participate actively in research projects related to mastery of the competencies targeted in the programs of study and to the educational objectives of the vocational education centre

COMPETENCY 12

To demonstrate ethical and responsible professional behaviour in the performance of his or her duties.

CRITERIA

Understands the values underlying his or her teaching.

Manages his or her class in a democratic way.

Provides students with appropriate attention and support.

Justifies his or her decisions concerning the learning and education of students to the parties concerned.

Respects the confidential nature of certain aspects of his or her work.

Avoids any form of discrimination toward students, parents or colleagues.

Situates the moral conflicts arising in class with reference to the major schools of thought.

Demonstrates sound judgment in using the legal and regulatory framework governing the teaching profession and the trade being taught.

ASSESSMENT

During and at the end of his or her initial training, the student teacher should be able to:

demonstrate sufficient responsibility in dealings with students that one can recommend, without reservation, that a class be entrusted to his or her care

answer to others for his or her actions by providing well-founded reasons

Chapter 4

Training Plan for Vocational Education Teachers

4 TRAINING PLAN FOR VOCATIONAL EDUCATION TEACHERS

The MEQ has defined a new training profile for vocational education teachers, which specifies the professional competencies that teachers are expected to possess before beginning and once they have completed their university-level teacher training program, the teaching contexts in which they are expected to work, and the principles that will guide universities in granting recognition for previous university-level training. In keeping with the focus on professionalization and a cultural approach to teaching described earlier, the university-level teacher training program will be based on a framework of twelve professional competencies that will be the same for all sectors, fields and levels of education. The meaning, components and expected level of mastery for the professional competencies specified here relate to the field of vocational education, and therefore to the Bachelor of Education degree in vocational education.

Every program of study leading to a Bachelor of Education degree in vocational education will have 120 credits, and must be designed in compliance with the training plan presented below.

The training plan has been designed to take into account the fact that the Bachelor of Education program will be taken both by candidates who are currently teaching, and candidates with work experience who wish to become vocational education teachers.

To ensure fair treatment for all prospective vocational education teachers, graduates of vocational education, technical education or university-level programs who already possess experience in their trade or profession will be able to register for the teacher training program. However, only candidates who have acquired the number of hours of job experience[6] specified in the *Regulation respecting teaching licences* in the appropriate field will be eligible for certification as teachers. A university that admits candidates who do not possess the required experience will have to provide the necessary training (via work-study or other programs) to allow them to reach the minimum requirements.

To facilitate access to the teacher training program and broaden the pool from which teachers are currently recruited, the training plan for vocational education teachers has been designed as a flexible system. For example, the training plan recognizes that candidates who have already begun or who intend to begin teaching in vocational education will already have mastered their teaching subject and, on certain conditions, will receive credit for their experience as part of their university program.

6. Currently 4,500 hours.

For the granting of a Bachelor of Education degree in vocational education, universities will be required to offer a teacher training program that provides future teachers with professional competencies specific to the teaching profession, namely:

1. To act as a professional inheritor, critic and interpreter of knowledge or culture when teaching students.
2. To communicate clearly in the language of instruction, both orally and in writing, using correct grammar, in various contexts related to teaching.
3. To develop teaching/learning situations that are appropriate to the students concerned and the subject content with a view to developing the competencies targeted in the program of study.
4. To pilot teaching/learning situations that are appropriate to the students concerned and to the subject content with a view to developing the competencies targeted in the program of study.
5. To evaluate student progress in learning the subject content and mastering the related competencies.
6. To plan, organize and supervise a class in such a way as to promote students' learning and social development.
7. To adapt his or her teaching to the needs and characteristics of students with learning disabilities, social maladjustments or handicaps.
8. To integrate information and communications technologies (ICT) in the preparation and delivery of teaching/learning activities and for instructional management and professional development purposes.
9. To cooperate with school staff, parents, partners in the community and students in pursuing the educational objectives of the school.
10. To cooperate with members of the teaching team in carrying out tasks involving the development and evaluation of the competencies targeted in the programs of study, taking into account the students concerned.
11. To engage in professional development individually and with others.
12. To demonstrate ethical and responsible professional behaviour in the performance of his or her duties.

The teacher training program should prepare future vocational education teachers to provide instruction in a given trade. Candidates will, on certain conditions, be credited for prior expertise in the trade or subject taught. Instruction in teaching the various components of the trade (both theoretical and practical) will be given in a continuous, gradual way, and this will be the defining feature of the teacher training program for vocational education teachers.

4.1 The Bachelor of Education Degree in Vocational Education

4.1 The Bachelor of Education degree in vocational education

The proposed training plan is a program of study leading to a Bachelor of Education degree in vocational education. The program has 120 credits, divided into two blocks: the first, 90-credit block leads to a special teaching licence and the second, 30-credit block leads to a teaching diploma (see Diagram 1 at the end of this section). The program takes into account the fact that most candidates in the program are, or have been, active teachers in either the public or private sector, and want to make teaching their career. These candidates will already hold a Diploma of Vocational Studies (DVS), a Diploma or Attestation of College Studies (DCS or ACS), or a university or equivalent degree in the field or subject taught, and will have demonstrated mastery of the trade and have experience in the subject to be taught.

4.1.1 A 90-credit block leading to a special teaching licence

☛ *60-credit component*

This component, for which a maximum of 60 credits is granted, integrates the various training activities listed below, to be provided concurrently. They will be defined by the universities concerned, working in collaboration with school board, school and teaching staff representatives from the vocational education sector.

As they begin their university-level training, candidates will be able to have their existing skills in the trade concerned assessed for credit later in the program. At this point they will also take a test to assess their mastery of the language of instruction. Where needed, they will be offered support to improve their language skills and linguistic knowledge to ensure that, on graduation, they will have acquired the necessary university-level competencies in the language of instruction.

The activities offered as part of the training program are:

- an introduction to teaching
- psychopedagogical and andragogical training
- practical training during teaching placements in the school system
- professional development activities in the trade to be taught or the teaching sector

Introduction to teaching

This training activity will include a minimum of three credits, and will be designed by each university in collaboration with the school boards; it will be given while the candidates are working and may be provided in schools under the responsibility of a person hired and accredited by the university.

The introduction to teaching will consist of theoretical and practical training focusing on an understanding of the documents relating to the programs of

study to be taught, the concept of competencies, the planning of teaching activities, the designing of learning situations, evaluation, and classroom management. The instruction provided for this training activity will include hours of observation, supervision, and discussion of teaching practices.

The introduction to teaching activity must by taken by all candidates who are first-time teachers, whatever their teaching load. In addition, teachers with a teaching load of 216 hours per year must also take the activity.

Teachers who are assigned a 216-hour teaching load for the second time must continue their university teacher training program in vocational education.

Psychopedagogical and andragogical training

This training activity will focus on the development of professional competencies in connection with knowledge of the programs of study, the concept of competency in the field of vocational education, the organization of the vocational education sector in Québec, the planning of teaching activities, the psychology of learning, the designing of learning situations, the use of ITCs in teaching, evaluation, classroom management, workplace health and safety and teaching strategies.

The fact that general and vocational education will be provided concurrently during each program of study, the resulting need to adapt teaching approaches, alternating work-study periods, the integration of target competencies by students, and the harmonization of the different educational levels also influence the competencies that vocational education teachers must acquire. The teacher training program will also take into account the fact that teaching is provided to both youth and adult students.

Other aspects considered will be the adaptation of teaching methods to ongoing developments in the trades and in the way they are taught, teaching approaches specific to the vocational education sector, and the organization of teaching.

Practical training during teaching placements in the school system

This activity will take place as a discussion of the skills acquired by each candidate. The placements will have the same value as the placements completed by prospective teachers in the general education teacher training program, and will be overseen by the university in collaboration with the supervising teachers and the administration of each vocational education centre. For candidates who are currently teaching, the placements will be part of their teaching load, while other candidates will complete placements in the school system. In both cases, the placements will serve as probationary periods.

Professional development activities in the trade to be taught or the teaching sector

The development of new technologies and of the competencies required to practise a trade in light of new developments in the workplace must also be a

focus of the teacher training program, in terms of the knowledge that candidates must update for themselves and then pass on to their students.

In this connection, a balanced integration of various activities, including participation in professional development activities in the workplace and specialized centres and in college or university training linked to the trade taught, will be targeted. Other possible activities include professional development activities carried out under agreements between vocational education centres and local businesses, the updating or drafting of appropriate instructional materials, and participation in pedagogical development activities for teachers.

☛ *A 30-credit component*

Recognition of trade-related competencies

A three-credit activity to recognize a candidate's knowledge of the trade or teaching area must be organized at an appropriate time during the program. The objective of the activity will be to give the candidate an opportunity to prepare a substantiated application for the recognition of equivalences to replace coursework in introduction to teaching, professional development in the trade or profession taught, and on-the-job experience. This examination of each candidate's professional history should take place before other professional development activities take place, and be used to establish needs for training in the candidate's chosen speciality.

For this purpose, the universities will grant credits in compliance with the basic principles for the recognition of prior learning defined by the Conseil supérieur de l'éducation (2000). The three principles are as follows:

- all persons are entitled to social recognition of their learning; however, it is incumbent upon them to prove that they have acquired such learning
- persons are not required to repeat learning they have already acquired; in the recognition of learning, the important thing is what the person has learned and not where, when or how it has been learned
- all prior learning recognition systems must be transparent

The universities will follow a number of operational principles in recognizing equivalences of subject-specific competencies:

- The recognition process for prior learning must remain the responsibility of each university.
- The prior learning must be certified using the same procedure as for the courses making up the program leading to the award of a Bachelor of Education degree in vocational education.
- The recognition is not for experience as such, but for subject-related learning acquired through experience.

- To be recognized, subject-specific prior learning must be analyzed by comparison with the subject-specific learning connected with a work situation targeted by a university-level teacher training program in vocational education.
- The recognition of prior learning must be based on a rigorous process to ensure its credibility.
- The recognition of prior learning must be based on a fair process that allows each candidate to demonstrate all his or her prior learning for official recognition purposes.
- All candidates must be treated equally, regardless of the university or region concerned, and for this purpose, the universities must work together alongside school and workplace representatives.

University attestation and special teaching licence

Given that the various program activities will take place concurrently for candidates who are currently teaching, the 90 credits for the first block may be acquired gradually over a period of roughly five years. Following this, candidates who have passed the test demonstrating mastery of the language of instruction will be issued with a university attestation showing completion of the 90-credit block. At this point, the MEQ will, on the recommendation of the university concerned, issue the candidate with a special authorization to teach.

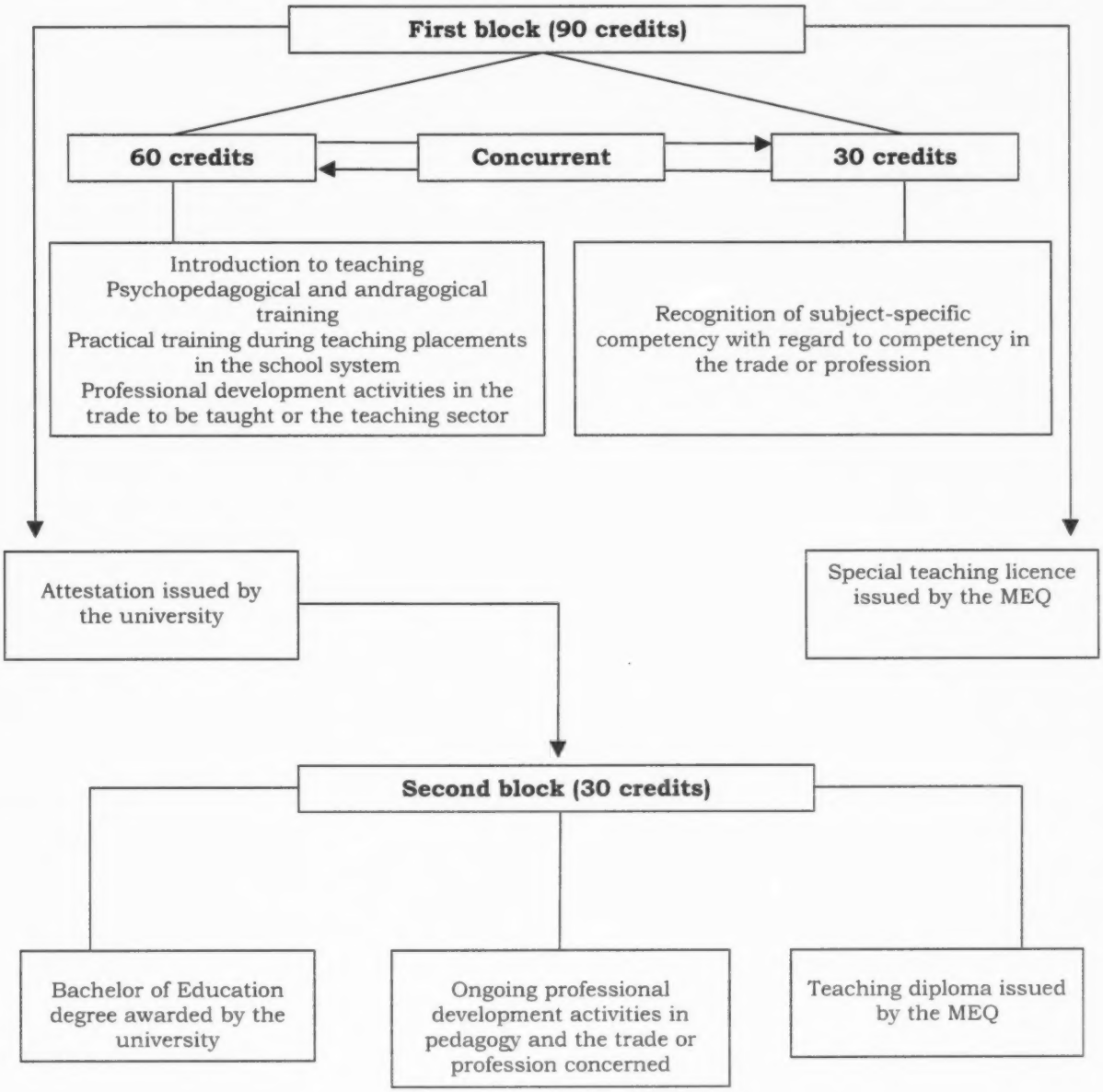
4.1.2 A 30-credit block leading to a teaching diploma

The 30-credit block is intended to take into account the need for vocational education teachers to undertake professional development activities as part of their training, and it must therefore be adapted for each trade taught and the requirements of each candidate. Priority must be given to extending the candidate's pedagogical, andragogical, didactic and technical competencies, in keeping with the goal of a learning and professional development continuum.

For this reason, as in the first block, the emphasis will be placed on research activities linked to the subject taught, the updating or drafting of appropriate instructional materials, and participation in on-the-job training periods. Once the 120 credits have been completed, the candidate will receive a Bachelor of Education degree and a teaching diploma.

DIAGRAM 1

BACHELOR OF EDUCATION DEGREE IN VOCATIONAL EDUCATION (120 CREDITS)


First block (90 credits)
60 credits
Concurrent
30 credits
Introduction to teaching
Psychopedagogical and andragogical training
Practical training during teaching placements in the school system
Professional development activities in the trade to be taught or the teaching sector
Recognition of subject-specific competency with regard to competency in the trade or profession
Attestation issued by the university
Special teaching licence issued by the MEQ
Second block (30 credits)
Bachelor of Education degree awarded by the university
Ongoing professional development activities in pedagogy and the trade or profession concerned
Teaching diploma issued by the MEQ

4.2 Elements of the Implementation Process

4.2 Elements of the implementation process

Each university will be responsible for designing programs to match the orientations for teacher training programs for vocational education and having them approved by the Comité d'agrément des programmes de formation à l'enseignement (CAPFE). The universities must then work jointly with their partners to find the best conditions and procedure for implementing the training plan whose outline has been approved by the Minister.

To make teacher training in vocational education accessible for all candidates will require the universities to adopt innovative approaches using, for example, new information and communications technologies to reach people living throughout Québec.

Chapter 5

Designing Teacher Training Programs to Promote the Development of Professional Competencies

5 DESIGNING TEACHER TRAINING PROGRAMS TO PROMOTE THE DEVELOPMENT OF PROFESSIONAL COMPETENCIES

The two general orientations and the reference framework for professional competencies presented in this document form the basis for the design of all teacher training programs leading to the granting of a Bachelor of Education degree in vocational education.

The two orientations for teacher training extend the general spirit of the education reform. The first orientation reaffirms the necessity of providing training of a professional type. The second emphasizes the cultural dimension of the training, which must produce cultured teachers. To meet these two main objectives, an approach based on professional competencies has been selected.

To provide more effective support for those responsible for designing and implementing teacher training programs, the following pages outline several points of reference concerning the two general orientations and the competency-based approach. The order of presentation is not hierarchical, since the points of reference relate to each other as parts of the same network.

5.1 Teacher training consistent with professionalization

- Teacher training programs should be designed in a way that is more in keeping with *professional logic*; in other words, they must allow candidates to develop the competencies required to actually practise their profession. The logic of the teaching subject should no longer be the dominant force in designing teacher training programs consistent with professionalization.

- Designing teacher training programs in a manner consistent with professionalization involves recognizing the *interactive dimension of teaching*. Candidates who are currently teaching, as well as prospective teachers, whatever the sector or subject area in which they teach, will have to assist and guide students as they construct their knowledge base. While vocational or technical subject-specific knowledge will remain essential, teachers will have to be education specialists in addition to being specialists in the trade concerned. In addition, they will work in collaboration with the other members of the teaching staff and cooperate with the vocational education centre team, parents, and various social and economic partners in attaining educational objectives. From this point of view, it is clear that the teacher training program for a given trade should be different from the training program for that trade, and should take into account the specific professional dimension of teaching.

- Teacher training programs designed in a manner consistent with professional logic should be based on the *development of professional competencies*; in other words, learning the competencies required to practise the profession. The competencies are developed through the ability to *mobilize certain specific resources* in order to understand and solve work-related problems.

  One of these resources is *subject-specific knowledge*, mainly related to the subject area taught. The prescribed program content, in a given trade, that practising and prospective teachers will teach should form the template for determining the *scope*, *depth* and *relevance* of the subject-specific knowledge provided as part of the teacher training program.

  The resources required for the development of professional competencies also include knowledge of a *pedagogical* and *didactic* nature. Various approaches, methods, means, resources and techniques relating to teaching-learning situations, evaluation and class management must be included in the teacher training programs. The new approach to education modifies the roles played by teachers and students with regard to teaching, learning and evaluation, and these points should also be taken into consideration in determining the elements to be included in a training program.

  Lastly, several professional competencies require the mobilization of *knowledge* linked to other aspects of the profession, practised *outside the classroom*. For example, teachers now have responsibilities on governing boards, and must be able to work with fellow teachers and businesses in a manner conducive to the development of competencies by students.

- The design of teacher training programs intended to develop professional competencies requires a more *program-based approach* and must promote *integrated training*. Knowledge must be mobilized to develop professional competencies. The emphasis placed on practical training during the last reform of the teacher training process was a step forward, but a dual approach in which theoretical courses and practical training activities are offered in parallel should be avoided. A "program-based" approach avoids program fragmentation and facilitates the integration of all activities. It is based on concerted action and the establishment of a network bringing together teacher training instructors, student teachers, school administrators and business managers within a "program team."

  The specific nature of the teacher training to be provided to practising teachers should facilitate this integration of activities.

- The design of teacher training programs intended to develop professional competencies must have a *connection with actual teaching*. School placements offer an ideal opportunity to exercise teaching competencies in a real-life context and assess the degree to which they have progressed and been assimilated. It is essential that schools offer student teachers the possibility of experiencing teaching in the field, giving them an opportunity

to demonstrate that they have the competencies required to practise the teaching profession.

- The design of teacher training programs intended to train teaching professionals requires a focus on the *construction of knowledge* rather than an approach based on application or a single teaching subject. Learning how to teach cannot be reduced to the application of technical solutions to practical problems, just as it cannot be limited to mastery of the teaching subject. Teachers cannot be trained without taking into consideration the real-life working context. This means that training mechanisms must be set up to allow candidates to learn *problem setting* and find solutions that fit the immediate context.

- The design of teacher training programs in keeping with professional logic must include elements relating to *the development of an ethic of responsibility*. Practising and prospective teachers must learn how to present and justify arguments to defend a given position.

- The design of teacher training programs in keeping with professional logic must include elements relating to the *development of reflexive thinking*. Future teachers must learn various ways to reflect on their teaching practices and find solutions that are appropriate to the complex context of the classroom.

5.2 Teacher training consistent with a cultural approach to teaching

- The design of teacher training programs consistent with a cultural approach to teaching must take into account the cultural role played by teachers. They must be *cultural brokers* and become the *inheritors*, *critics* and *interpreters* of culture as part of their teaching duties.

  Concerning *culture as an object*, the elements of secondary culture considered to be desirable components of the teacher training program must be discussed in each university. In terms of the subject-specific content for each subject area, the content of the courses taught should be the template for selecting the objects of secondary culture to promote. It is clear that future teachers must master more of the subject than what is prescribed by each school program. In terms of didactic and pedagogical knowledge, the approaches to teaching, learning and evaluation currently applied in vocational education centres should serve as guidelines. However, given the special relationship that teachers will have with knowledge, the teacher training program should allow them to become not only inheritors (reservoirs of objects of secondary culture) but also critics and interpreters of culture.

  Concerning *culture as a relationship* (to the world, to others and to oneself), it will be important to create a relationship, in each course of the teacher training programs, between the course content, the existing culture of the student teachers, and the practice of the profession, to make the student

teachers more effective in demonstrating a living relationship to culture in their own teaching. The focus should be less on adding courses on culture, and more on creating a positive relationship to culture in a range of training activities.

5.3 An approach to teacher training based on professional competencies

- The design of a teacher training program using an approach based on professional competencies has a direct influence on the training process. A competency is the ability to mobilize resources to face the problems that arise in professional practice, and training mechanisms must promote the development of professional competencies. Although a more traditional approach can still be relevant for teaching certain training objectives, *contextualized training based on the type of practical situations encountered in practising the profession* is the most appropriate form of training to ensure the development of competencies and to make the training program more coherent.

- The implementation of an approach based on professional competencies has a direct influence on the *methods used to evaluate learning*. Although school placements are the best time to evaluate the degree to which competencies have progressed and been assimilated, competencies can also be evaluated at any point in the training process, outside the closed structure of three-credit courses. The evaluation methods selected must allow a verification of whether a competency has been acquired, and also of whether it has stabilized. The methods may vary, and be based on assignments, tests, logbooks, video analyses, the comments of supervising teachers, and so on.

5.4 Training organization

- *Centralized control* over teacher training programs by each faculty of education is important if the programs are to remain coherent and professionally-oriented. Control should be exercised by program committees that bring together members from the faculty of education, other faculties, the teaching and business communities and the student body, all working together towards the goal of professionalization. If teaching is to become professionalized, close collaboration will be required between teacher training providers, not only within the education faculty but also within the other university faculties and training centres. In addition, partnerships between the university community, the school system and the business community must be intensified and extend beyond the organization of practical training.

- Professionalization will also involve bringing together, within each university, the three spheres of *research*, *training* and the *profession*. Professionalization must be based on research findings, especially findings that analyze the work of teachers in the classroom. In addition, the

authorities responsible for training programs should set up systems to gather data on the entry profile of selected candidates, the performance of program graduates, and the training processes employed, to facilitate the exchange of information concerning training programs within the university and with other universities offering similar programs.

- In order to take into consideration the needs and expectations of the school system with regard to teacher training, *university faculty members must master the underlying principles of the reform process currently being implemented in Québec schools.* It is even more important that they be made aware, or perhaps trained in, the orientations and professional competencies targeted by the reform of teacher training programs. In this connection, those responsible for the training programs should set up a procedure to assess their own training process and offer *appropriate training sessions to their staff.*

- To design training plans based on the development of professional competencies, human, material, financial and logistic *resources*, including personal computers and techno-pedagogical support, must be made available for training groups. This is especially important to ensure the success of the approach based on professional competencies.

- An approach based on the development of professional competencies will involve *greater flexibility in traditional organizational structures*, such as three-credit courses given by instructors working in parallel. The implementation of integrated training activities (such as projects) under the responsibility of teams of instructors working together for an entire semester or longer is one possibility that should be explored.

- An approach based on professional competencies requires a substantial investment in the training provided to teachers. Although the current trend in the university community is to work towards the development of research activities, instructors can be encouraged to focus on *research into teaching practices*, thus combining their research and teaching activities. Possible areas of research include analyzing their own training practices, collaborative research, understanding the teaching process in vocational education, and the like.

- The *support* provided for student teachers is also an important factor in the successful implementation of an approach based on professional competencies. In some existing university programs based on this approach, such as engineering or medicine, support services are considered as having strategic importance. In particular when projects are the main focus, it is essential for the students' work to be closely supervised.

- The *support*, *training* and *integration of term lecturers* responsible for teacher training are also important, given that the teacher training program requires them to make a personal commitment and also to become integrated within each program team.

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In many respects, the two general orientations and the approach based on professional competencies do not represent a new departure in the field of teacher training. As early as the 1992 reform, emphasis was placed on the professional nature of teaching and the importance of a sound general culture for future teachers. Some university programs have already moved in this direction, and teacher training programs in vocational education will now become part of this trend.

It will be necessary, during the first few years, to monitor closely the implementation of the new teacher training programs in vocational education, in order to evaluate their application and effect.

APPENDIX

Document preparation and consultation process

The team that prepared this document was given the task of adapting, for the vocational education sector, the existing orientations for teacher training in the general education sector. In addition, it was important to design a training model to match the specific features of teaching in the vocational education sector, and the intake of new teachers.

To complete its work, the team responsible for designing and drafting the document received input, comments and suggestions from partners within the MEQ and working in the education community, over a period of several years.

The orientations that should apply to the training of vocational education teachers have been the subject of hot debate over the years. The Table nationale de consultation, made up of the organizations listed below, met several times before adopting the training plan described in this document. In addition, during the last meeting of the Table nationale de consultation, it was agreed that a working committee made up of members from the Table would be given responsibility for finalizing the orientation document and determining the key guidelines for the recognition of prior learning. These members are also listed below, as are all those who took part in the debates concerning recognition of the prior learning and experience of vocational education teachers.

ORGANIZATIONS REPRESENTED AT THE TABLE NATIONALE DE CONSULTATION:

Alliance des manufacturiers et des exportateurs du Québec
Association des administrateurs des écoles anglophones du Québec
Association des cadres scolaires du Québec
Association des directeurs généraux des commissions scolaires
Association montréalaise des directions d'établissements scolaires
Association of Directors-General of English School Boards of Quebec
Association québécoise des commissions scolaires
Association québécoise du personnel de direction des écoles
Conférence des recteurs et des principaux des universités du Québec
Conseil pédagogique interdisciplinaire du Québec
Direction de la formation professionnelle, Commission de la construction du Québec
Direction de l'organisation pédagogique, ministère de l'Éducation
Fédération des associations des établissements privés
Fédération des commissions scolaires du Québec
Fédération québécoise des directeurs et directrices d'établissement d'enseignement
Fédération des syndicats de l'enseignement du Québec

Quebec English School Board Association
Quebec Provincial Association of Teachers

MEMBERS OF THE WORKING COMMITTEE OF THE TABLE NATIONALE DE CONSULTATION

Julie Bouffard, Direction de la formation et de la titularisation du personnel scolaire, ministère de l'Éducation
Berthier Dolbec, Fédération des commissions scolaires du Québec
Bernard Dufourd, Commission scolaire de Laval (Association des cadres scolaires du Québec)
Walter Duzara, Association des administrateurs des écoles anglophones du Québec
Denise Gagnon-Messier, Conseil pédagogique interdisciplinaire
Yves Piché, Commission de la construction du Québec
Aline Tremblay, Centrale de l'enseignement du Québec
Sylvie Turcotte, Direction de la formation et de la titularisation du personnel scolaire, ministère de l'Éducation
Jean Turgeon, Direction de la formation et de la titularisation du personnel scolaire, ministère de l'Éducation
Jean-Claude Vachon, Université du Québec à Chicoutimi

INDIVIDUALS WHO TOOK PART IN DISCUSSIONS CONCERNING THE RECOGNITION OF PRIOR LEARNING

Marc-Yvon Bisson, Centre de formation professionnel de Neufchâtel, Commission scolaire de la Capitale
Aline Buron, Direction générale de la formation professionnelle et technique, ministère de l'Éducation
Sylvie Demers, Direction de la formation et de la titularisation du personnel scolaire, ministère de l'Éducation
Line Desmarais, École nationale de police du Québec
Bernard Dufourd, École polymécanique de Laval
Sonia Fradette, Commission scolaire de la Capitale
Richard Gagnon, Faculté des sciences de l'éducation, Université Laval
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Angèle Gemme, Centre d'évaluation des compétences, Commission scolaire de Saint-Hyacinthe
Colette Gendron, Commission scolaire de Montréal
Ginette Lamarre, Programme d'études collégiales des forces canadiennes, Cégep d'Ahuntsic
André Maurais, Carrefour Formation Mauricie, Commission scolaire de l'Énergie
Denis Ménard, Commission de la construction du Québec
Jo-Anne Paquin, Centre Paul-Émile-Dufresne, Commission scolaire de Laval
Yves Piché, École des métiers de la construction, Commission scolaire de Montréal

Sylvie Turcotte, Direction de la formation et de la titularisation du personnel scolaire, ministère de l'Éducation
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